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PERSONAL.

Mr. George West has been appointed Receiver of the Glenwood & Polytechnic Street Ry., of Fort Worth, Tex.

Mr. George Brambel has resigned as City Engineer of Mayville, N. Dak., and is succeeded by Mr. Peter Sievert.

Mr. J. M. Daly has been appointed General Manager of the Cape Breton Ry. Extension, with headquarters at Hawkesbury, N. S.

Mr. G. D. Cash has been appointed Division Superintendent of the Cananea Consolidated Copper Co.'s railway, with headquarters at Naco, Ariz.

Mr. Thomas Bolan, Civil Engineer, of Toledo, O., has left for El Paso, Tex., where he will be engaged on the construction of a new railroad.

Mr. Mace Moulton, M. Am. Soc. C. E., of Springfield, Mass., and Miss Bertha Welch, also of that place, were married on Nov. 20 at Dorchester.

Mr. N. Baxter, Jr., President of the Tennessee Coal, Iron & R. R. Co., has resigned to accept the Presidency of the Cumberland Coal & Coke Co.

Mr. Simon Cordial, of Rensselaer, N. Y., has been appointed Chief Engineer of the East Albany water-works at Bath, N. Y., succeeding Mr. Sanderson.

Mr. C. W. Whitney has been appointed Chief Engineer of the California Eastern R. R., with headquarters at Manvel, Cal., succeeding Mr. J. M. Vanderwerker, resigned.

Mr. John Player, Superintendent of Machinery of the Atchison, Topeka & Santa Fe Ry., has been appointed Consulting Superintendent of Motive Power of that road.

Mr. William Cross, formerly Mechanical Superintendent of the Western Division of the Canadian Pacific R. R., has been appointed Chief Engineer of Tests at Montreal, Que.

Mr. Godfrey Morgan, General Manager of the Niagara Gorge R. R., has resigned, and will be succeeded by Mr. Bert L. Jones, Secretary and Treasurer, of Buffalo, N. Y.

Mr. C. W. Hole, General Freight and Passenger Agent of the Kansas City, Watkins & Gulf R. R., has been appointed General Manager of the Orange & Northwestern R. R.

Mr. W. J. Morkill has been appointed to succeed Mr. G. M. Stewart as General Manager of the Interoceanic Ry. of Mexico, and will have his headquarters at Mexico City, Mexico.

Mr. B. J. T. Jeup, formerly City Engineer of Indianapolis, Ind., has opened an office in the Indiana Trust Co. building, in that city, to carry on a general engineering practice.

Mr. Charles Greenough, Master Mechanic of the Bradford, Bordell & Kinzua Ry., has been appointed Superintendent of Motive Power, with headquarters at Foxburg, Pa.

Mr. G. E. Barker has resigned as Superintendent of the Columbia & Montour Electric Ry., of Bloomsburg, Pa., to accept a position with the Union Traction Co., of Philadelphia, Pa.

Mr. John H. Quinton, M. Am. Soc. C. E., of the firm of Quinton, Olmsted & Sanders, Consulting Engineers, of Los Angeles, Cal., arrived in New York city from Liverpool last month.

Mr. T. J. English, Division Superintendent of the Baltimore & Ohio R. R., at Newark, O., has been appointed Superintendent of the Pittsburg Division, succeeding Mr. J. Barron, resigned.

Mr. Wm. D. Faucette, who was in the service of the State Engineer of North Carolina, has recently been appointed Inspecting Engineer on Seaboard Air Line and is now at Savannah, Ga.

Prof. Richard O. Heinrick, General Manager of the European Weston Electrical Instrument Co., Ltd., Berlin, Germany, is now in this country on a trip for consultation. He will return this week.

Gen. Adelbert R. Buffington, Chief of the Bureau of Ordnance, U. S. A., has been retired, having reached the age limit. Gen. Buffington became Chief of the Bureau of Ordnance in 1899, and during his incumbency many improvements have been made by that department, conspicuous among these was the strengthening of the coast defences. Gen. Buffington, with Gen. Crozier, is the inventor of the Buffington-Crozier disappearing gun-carriage.

Mr. D. D. Carothers, Engineer of Maintenance of Way of the Baltimore & Ohio Southwestern Ry., has been appointed Division Superintendent of the Baltimore & Ohio R. R., with office at Chicago, Ill.

Mr. Willis F. Brown, former City Engineer of Toledo, O.; Mr. J. D. Cook, of Toledo, and Mr. Harley J. Hill, of Cleveland, have formed a co-partnership to carry on a general civil and sanitary engineering business.

Mr. Frank J. Schnauber has been appointed City Engineer of Syracuse, N. Y., to succeed Mr. C. A. Sweet. Mr. Schnauber is 37 years of age and a graduate of the University of Syracuse in the engineering class of 1888.

Mr. L. F. Loree has been elected President of the Baltimore & Ohio Southwestern R. R., succeeding Mr. Edwin R. Bacon, who is made Vice-President. Mr. W. M. Greene is elected Second Vice-President and General Manager of that road.

Mr. W. H. Starr, Division Superintendent of the Chicago & Alton Ry. at Kansas City, Mo., has been appointed Engineer of Construction of this road, with office at Chicago. He will be in charge of the track elevation, grade reductions and other work.

Mr. E. M. Roberts, formerly Superintendent of Motive Power and Machinery of the South Carolina & Georgia R. R., has been appointed Superintendent of Motive Power and Equipment of the Detroit Southern Ry., with headquarters at Detroit, Mich.

Mr. Arthur Piers, Superintendent of the Pacific steamers of the Canadian Pacific R. R., has been appointed General Superintendent of the company's entire fleet, comprisng the Pacific service to the Orient, the Pacific Coast steamers and the Lakes service.

Mr. William E. Barrett and Mr. Horace W. Smedley, Commissioners of Lower Merion Township, Pa., have sailed for Europe for the purpose of studying the sewerage systems of Continental cities with the view of adopting the most suitable for Lower Merion.

Messrs. A. Campignon, S. Campignon and Ch. Dunes, Machinery Experts of Paris, France, are at present in the United States for the purpose of studying American methods. They were recently in Cleveland, O., inspecting machine shops and other industrial plants.

Mr. J. J. Frey, who recently resigned as President and General Manager of the Florence Creek, Canyon City & Cripple Creek and Gold Circle Rys., is now President of the proposed Trans-Alaskan Ry., which is to run from Cook's Inlet, Alaska, to Cape Prince of Wales, 825 miles.

Messrs. Charles H Macloshie, Engineer of the Union Electric Ry., of Berlin; E. D'Hoop, Director of tramways in Brussels, and I. Pedrilali, Chief Engineer of the electric railway in Brussels, are visitors to this country, making inspections and investigations of the various systems of electric railway.

Mr. W. B. Taylor, Supervisor of the Chicago & Alton Ry., and Mr. George L. Moore, Roadmaster of the Erie Ry., have each been appointed Engineer of Maintenance of Way of the Chicago & Alton Ry., in charge of the western and eastern divisions, with offices at Kansas City, Mo., and Bloomington, Ill., respectively.

Mr. Clarence T. Johnston, of Cheyenne, Wyo., assistant in charge of the Western office of the irrigation investigations being carried on by the Office of Experiment Stations, U. S. Department of Agriculture, sailed for Egypt on Nov. 23. Mr. Johnston will report on the engineering and cultural phases of irrigation in Europe.

Mr. Clement C. Smith, who was for five years Second Vice-President and General Manager of the construction and special work departments of the Falk Manufacturing Co., is now President of the Columbia Construction Co., Colby & Abbot Building, Milwaukee, Wis., making a specialty of the promotion and construction of electric railways and power plants.

Mr. George R. Henderson has been promoted from Assistant Superintendent of Machinery to be Superintendent of Machinery of the Atchison, Topeka & Santa Fe Ry., succeeding Mr. J. Player, who has resigned, but will act as Consulting Mechanical Engineer. Mr. Henderson was formerly Assistant Superintendent of Motive Power of the Chicago & Northwestern Ry.

Major William Crozier has been appointed Chief of Ordnance, U. S. A., with the rank of Brigadier General. Gen. Crozier is a native of Ohio, and was appointed to the U. S. Military Academy from Kansas in 1872. Upon graduating, 1876, he entered the artillery branch of the service, and was transferred to the ordnance in 1881. He is a joint inventor with Gen. Buffington, whom he succeeds, of the Buffington-Crozier disappearing gun-carriage.

OBITUARY

Mr. C. B. Haynes, formerly Assistant City Engineer of Atlanta, Ga., died Nov. 12 in that city.

Mr. H. W. Drake, Hydraulic Engineer, died suddenly near his home in Camillus, N. Y., on Nov. 15.

Mr. Edward Joslin, manufacturer of wood-working machinery, died at Keene, N. H., on Nov. 21, aged 91 years. In 1830, together with J. H. Fay, he established the J. H. Fay Co., now the J. H. Fay & Eagen Co., with headquarters at Cincinnati, O., manufacturers of wood-working machinery.

Mr. G. Frank McLaughlin, Superintendent of the Nickel & Copper Refining Co., was shot and killed by Mr. Lewis Hartsough, his partner, at Sheridan, Wyo., on Nov. 20, after a quarrel over business matters. Mr. McLaughlin was a resident of Paterson, N. J., and went to Sheridan every summer to superintend the operations of a copper mine in which he was largely interested. He was born in Johnstown, Pa., about 52 years ago, and was formerly employed in the Cambria Rolling Mills. He was for two years in charge of the Edison plant in Paterson at night.

Mr. Walter O'Malley, Superintendent of the Pocahontas Collieries Co., along with Messrs. William Priest, State Mine Inspector of West Virginia; A. S. Hurst, Chief Coal Inspector for the Castnor, Curran & Bullitt Co., of Philadelphia; Robert St. Clair and William Oldham, Substitute Coal Inspectors; Frazier G. Bell, Mining Engineer, and Joseph Cardwell, Manager of the Shamokin Coal Co., of Maybury, W. Va., entered the west main of the Southwest Virginia Improvement Co.'s collieries for the purpose of examining the situation in regard to the recent explosion and fire in the Baby mine, and all succumbed to the deadly effects of white damp. They entered the mine at 11 o'clock on the morning of Nov. 22 and were found at noon Sunday, Nov. 24, by a rescuing party.

ENGINEERING SOCIETIES.

COMING MEETINGS.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS.
Dec. 3 to 6. Annual convention, New York city. Secy., F. R. Hutton, New York, N. Y.
AMERICAN ECONOMIC ASSOCIATION.
Dec. 27 to 30. Fourteenth annual convention at Washington, D. C. Acting-Secy., Frank A. Fetter, Cornell University, Ithaca, N. Y.
MICHIGAN ENGINEERING SOCIETY.
Jan. 7, 8 and 9, 1902. Annual meeting, Grand Rapids, Mich. Secy., F. Hodgman, Climax, Mich.
AMERICAN SOCIETY OF CIVIL ENGINEERS.
Jan. 15, 1902. Annual meeting at New York city.

ROCHESTER SOCIETY OF ENGINEERS.—At the meeting of Nov. 15 a paper was read by Mr. P. H. Dater on "The History of the West Ave. Bridge." The paper was a description of the work that has been done on the bridge to date. The bridge is to be completed early in the summer of the coming year.

LOUISIANA ENGINEERING SOCIETY.—In response to an invitation to inspect the new government floating dry dock at Algiers, a party of members of this society paid a visit to the dock on Nov. 14. The party was taken down the river by Mr. Chas W. Wood on the tug "Leo." At the dock they were received by Superintendent Anderson, Inspector Hewes and Chief Engineer Styrlander, of the Maryland Steel Co. These gentlemen showed the party over the dock and explained its construction and operation.

WESTERN SOCIETY OF ENGINEERS.—At the meeting on Nov. 20, Prof. Wm. D. Pence, of Purdue University, read a paper on "The Coefficient of Expansion of Concrete," which called forth considerable discussion as to the expansion of concrete, the effects of temperature upon steel members embedded in concrete, and the relative merits of wet and dry concrete. The paper was printed in our issue of Nov. 21. Mr. W. H. Finley, Principal Assistant Engineer of the Chicago & Northwestern Ry., presented some notes on the protection of the metal work of ballasted bridge floors. He exhibited specimens of an asphalt concrete covering used by the C. & N. W. Ry. for trough floors of this kind, which has proved very successful.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS.—The 44th meeting of this society will take place at New York Dec. 3 to 6, 1901. The convention will be opened by the address of the President, Mr. S. T. Wellman, in the society rooms, at 12 W. 31st St., at 9 p. m., Tuesday, Dec. 3. The subject of the address will be "Early History of Open-Hearth Steel Manufacture in the United States." The business of the convention will be taken up on Wednesday morning, Dec. 4, at 10 o'clock, when thr change of the annual dues will come up for consideration. Nothing is on the program for Wednesday afternoon, but at 9 p. m. will be held a reception of members and guests by the President and President-elect at Sherry's, 44th St. and Fifth Ave. Thursday morning will be occupied with the reading of professional papers, while in the afternoon a memorial service in dedication of the Robert Fulton memorial will be held in Trinity Church. The evening session on Thursday and the Friday morning session will be devoted to professional papers. Nothing is scheduled for Friday afternoon, in order that the members may use this time for business or excursions.

AMERICAN RAILWAY ENGINEERING AND MAINTENANCE-OF-WAY ASSOCIATION.—The Committee on Buildings has issued a circular calling for information as to recent practice in the construction of coaling appliances, and also as to the cost of handling coal at coaling stations. The Committee on Iron and Steel Structures has issued three circulars. One of these is for information to assist in the determination of the loads which railway bridges should be designed to carry; the second is to ascertain the practice of large buyers of steel bridges

and buildings in regard to their methods of inviting proposals and placing contracts for such work, and also the relations between the purchaser and contractor in regard to design and erection; the third circular refers to proposed uniform specifications for rolled steel, and calls for information as to the chemical and physical properties of steel, the planning and bending of test specimens, etc. The Committee on Roadway has issued a circular concerning the relation of tonnage rating to grade reductions, also methods of ballasting, etc. Copies of these circulars may be obtained from the Secretary of the association, Mr. L. C. Fritch, 1562 Monadnock Block, Chicago.

ENGINEERING ASSOCIATION OF THE SOUTH.—The twelfth annual dinner of this society was held at the University Club, at Nashville, Tenn., on Nov. 14. Mr. W. L. Dudley acted as toastmaster. Maj. E. C. Lewis spoke on "The Engineering Association of the South;" Prof. W. H. Schurman, of Vanderbilt University, took as his subject "The Making of Engineers," while Maj. W. F. Foster's subject was "Engineers of the Early Days." Mr. H. H. Trabue followed with a few pertinent remarks on "The Engineer of To-day." He said, in part:

People imagine that an engineer is a mathematician who has mastered everything from calculus to arithmetic. In reality, I venture to say that of all the engineers gathered here to-night not a dozen can extract the cube root of a number containing seven figures. There are other qualifications which the engineer must possess, chief among which is energy and a determination to accomplish any duty which it may fall to his lot to perform. The engineer of to-day must be a diplomat, as his duties bring him in contact with all classes of men, from the governor of a state, the president of a great railroad, down to the mountaineer living in the most humble cabin on the side of some desolate mountain. He must be more or less a lawyer, as he is constantly making contracts and writing leases and deeds. He must be something of a doctor, because he has got to digest cornbread and bacon and sleep on a bed of cobs in some mountaineer's hut on many an occasion, and must always be ready with a remedy for the croup or the whooping cough for some mother with a sick child with whom he may be stopping. And, above all, he must be a financier, for compared with other professional men, he receives such small compensation for his services that he must be a financier to make ends meet.

After the dinner the election of officers for the ensuing year was held. Prof. W. H. Schurman was elected President; Vice-Presidents, Messrs. A. J. Lamb and J. W. Kendrick; Secretary and Treasurer, Mr. Howard M. Jones; Directors for Tennessee, Messrs. W. F. Foster, James Geddes, E. C. Lewis and H. McDonald; Directors for outside of Tennessee, Messrs. J. B. Atkinson, E. E. Betts and J. F. O'Brien. At the next regular meeting of the association Mr. F. S. Washburn, of Nashville, Tenn., will read a paper on "The Nitrate Industry of Chili."

NEW YORK RAILROAD CLUB.—The meeting of Nov. 21 was the annual meeting of this club, and was held in the rooms of the American Society of Mechanical Engineers, at 12 West 31st St. The evening's subject was a very interesting one and led to an equally interesting discussion. Mr. F. J. Cole, of the American Locomotive Co., presented a paper on "Recent Locomotive Construction and Performance." The paper emphasized four principal features of present improvement—(1) the general introduction of the wide firebox for burning bituminous coal; (2) the use of flues of largely increased length; (3) the improvements in the design of piston valves and their introduction into general use; (4) the recent progress made in the use of tandem compound cylinders. Following Mr. Cole's remarks, Mr. S. M. Vauclain, of the Baldwin Locomotive Works, opened the discussion on the paper. He differed with the author on the subject of the use of piston valves, and stated that the large majority of engines being built by his company at present are equipped with slide valves. He presented a large number of lantern slides of engines recently constructed at the Baldwin works, covering all types of modern high-service locomotives. Referring to the slides, the speaker brought out the main tendencies of present day design and the causes that have produced these changed types. At the conclusion of his talk he emphasized the fact that all present and future changes in design are initiated entirely by the superintendents of motive power of the various railroads. By way of illustration, he stated that no order received by his company was for exact duplicates of the previous order. The Secretary then read letters on the subject of the evening contributed by Mr. H. Bartlett, of the Boston & Maine Ry., and Mr. Angus Sinclair, editor of "Locomotive Engineering." The discussion was carried further, among others by Mr. M. N. Forney, whose remarks were largely reminiscent, with the exception of his advocacy of the use of superheated steam; Mr. J. N. Barr, of the Erie Ry., who called attention to the decrease in reliability and service efficiency of many parts, such as stay-bolts, rod-brasses, engine-frames, etc.; Mr. G. W. West, of the New York, Ontario & Western Ry., and others. The election of officers for the ensuing year resulted in the re-election of the following gentlemen: President, H. H. Vreeland, Metropolitan St. Ry. Co.; First Vice-President, W. W. Wheatley, Brooklyn Rapid Transit Co.; Second Vice-President, A. M. Waitt, New York Central Ry.; Third Vice-President, W. F. Potter, Long Island Ry.; Treasurer, C. A. Smith, Union Tank Line. The Executive Committee is composed of G. W. West, New York, Ontario & Western Ry.; W. W. Snow, Ramapo Foundry Co.; Wm. McIntosh, Central R. R. of New Jersey. The Finance Committee is composed of R. M. Dixon, Safety Car Heating & Lighting Co.; W. B. Albright, Sherwin-Williams Co.; D. M. Brady, Brady Brass Co. The annual report of the Secretary showed that the club's membership has increased to 1,010, with a balance in bank of almost $6,000. The question of new quarters for the club will doubtlessly be finally settled before the next meeting. W. B. Yereance, Secy., 168 Montague St., Brooklyn, N. Y.

TRADE PUBLICATIONS.

(The standard sizes for pamphlets and trade catalogues recommended by all the principal engineering societies of the United States are: 3½ x 6 ins., 6 x 9 ins., and 9 x 12 ins.)

COMBUSTION APPARATUS.—Baker & Co., Newark, N. J. Paper, 3½ × 6 ins.; pp. 32; illustrated.

This describes the Shimer platinum crucible combustion apparatus for the determination of carbon in iron, steel, etc.

PRODUCER GAS.—R. D. Wood & Co., Philadelphia, Pa. Paper, 8½ × 10½ ins.; pp. 4; illustrated.

This is a brief announcement of the fact that the company is prepared to furnish "Mond" gas producers for this country.

GAS ENGINES.—Lennox Machine Co., Marshalltown, Ia. Paper, 6 × 8¾ ins.; pp. 38; illustrated.

The Lennox engine is of the center-crank type. The illustrations show it applied to various purposes, and there are a number of testimonials.

PNEUMATIC TOOLS.—Catalogue No 15. Chicago Pneumatic Tool Co., Monadnock Block, Chicago, Ill. Paper, 9 × 12 ins.; pp. 64; illustrated.

All varieties of pneumatic tools are here described. Some riveters of large size are a special feature.

ELECTRICAL MACHINERY.—Westinghouse Electric & Mfg. Co., Pittsburg, Pa. Paper, 7 × 10 ins.

Circular 1055 describes and illustrates alternating current switchboards, for polyphase circuits from 1,100 to 2,200 volts. Circular 1057 deals with transformers for lighting and power work.

DRY KILNS AND APPARATUS.—Catalogue No. 114. B. F. Sturtevant Co., Boston, Mass. Paper, 6½ × 9 ins.; pp. 86; illustrated.

This shows the application of forced draft and hot blast apparatus to lumber dry kilns. Apartment kilns, tower kilns, progressive kilns, etc., are illustrated, and many useful pointers are given on the subject of drying lumber.

ORE CONCENTRATORS.—The Dimmick Concentrating Co., Equitable Bldg., Denver, Colo. Paper, 9 × 6 ins.; pp. 6; illustrated.

The Dimmick system involves the use of two machines, described here, a classifier and a concentrator. Special points attained by use of this apparatus are elimination of water during classification, recovery of finest slime values, etc.

COMPRESSED AIR HOUSE CLEANING.—General Compressed Air House Cleaning Co., St. Louis, Mo. Paper, 5½ × 7½ ins.; pp. 32; illustrated.

This company has devised special apparatus for cleaning by compressed air. The method is applied to carpets, furniture, hangings, walls, etc., and is especially designed for application to theatres, hotels, and other large establishments of like nature.

AIR COMPRESSORS.—Sullivan Machinery Co., 135 Adams St., Chicago, Ill. Catalogue No. 47. The Sullivan Air Compressors. Paper; 6 × 9 ins.; pp. 30; illustrated.

This catalogue describes the features of this air compressor for which the makers claim superiority. Economy and reliability are the main points in the design. Full dimensions, weights, directions for ordering and some useful tabular matter are given.

WROUGHT STEEL TRUCK.—J. G. Brill Co., Philadelphia, Pa. Paper, 9 × 6 ins.; pp. 32; illustrated.

A solid wrought steel passenger truck, especially adapted for use on street railways, is here fully described and illustrated, and its advantages are pointed out. Another section treats in the same manner of a similar Master Car Builders' standard 4-wheeled truck for regular railway service. Letters from users follow.

COOLING TOWERS.—Catalogue No. 11. Victor Cooling Tower Co., St. Louis, Mo. Paper, 6 × 9 ins.; pp. 20; illustrated.

Cooling towers for cooling condensing water and thus enabling it to be used over and over, are at present attracting much attention among steam engineers. This company makes both natural draft and forced draft towers, and has applied them to steam condensers, ammonia condensers, vacuum pans, etc.

CONSTRUCTION NEWS.

CONDENSED LIST OF CONTRACTS PENDING WITH DATE OF OPENING BIDS.

Bids to be opened	Work.	Place.	See Eng. News.
Nov. 28.	Sewer,	New Philadelphia, O.	Nov. 21
Nov. 28.	Bridge,	Manassas, Va.	Nov. 14
Nov. 29.	Heating, etc.,	Kansas City, Mo.	Nov. 14
Nov. 29.	Life saving station,	San Francisco, Cal.	Nov. 14
Nov. 29.	Sewers,	Glenville, O.	Nov. 21
Nov. 29.	Sewer,	Binghamton, N. Y.	Nov. 21
Nov. 30.	Gasoline lamps,	Milwaukee, Wis.	Nov. 21
Nov. 30.	Water-works engineer,	Matawan, N. J.	Nov. 21
	Advertised, Engineering News, Nov. 21.		
Nov. 30.	Court house,	Williamson, W. Va.	Nov. 21
Nov. 30.	Schools,	Marquette, Mich.	Nov. 14
Nov. 30.	Library,	Waco, Tex.	Nov. 14
Nov. 30.	Water-works,	Fort Dade, Fla.	Nov. 14
Nov. 30.	Torpedo boat slips,	Norfolk, Va.	Nov. 14
Nov. 30.	Plans for capitol,	Harrisburg, Pa.	Aug. 29
Nov. 30.	Buildings (2),	Mare Island, Cal.	Oct. 17
Nov. 30.	Bridge superstructure,	Cincinnati, O.	Nov. 7
Nov. 30.	High school,	Oshkosh, Wis.	Nov. 7
Nov. 30.	Building,	New York, N. Y.	Nov. 7
Nov. 30.	Bridge,	Port Huron, Mich.	Nov. 28
Dec. 1.	Sewers (3 miles),	Pasadena, Cal.	Nov. 28
Dec. 1.	Tubular well,	Bement, Ill.	Nov. 7
Dec. 2.	Heating apparatus,	Clinton, Ia.	Nov. 21
Dec. 2.	Court house,	Hazlehurst, Miss.	Nov. 14
Dec. 2.	Wharves, etc.,	Honolulu, H. I.	Nov. 14
Dec. 2.	Water bonds,	Lemoore, Cal.	Nov. 7
Dec. 2.	Jail,	Martinez, Cal.	Nov. 7
Dec. 2.	Sewers,	Elwood, Ind.	Nov. 14
Dec. 2.	Library,	Houston, Tex.	Nov. 14
Dec. 2.	Water-works,	Fayette, Miss.	Nov. 14
Dec. 2.	Bridge plans,	Jackson, Cal.	Nov. 21
Dec. 2.	Electric power,	Whittier, Cal.	Nov. 21
Dec. 2.	Water-works,	Caruthersville, Mo.	Nov. 21
Dec. 2.	Paving,	Toledo, O.	Nov. 21
Dec. 2.	Sewer,	Salina, Kan.	Nov. 21
Dec. 2.	Electric plant, etc.,	Brooklyn, N. Y.	Nov. 28
Dec. 2.	Sewers,	Goshen, Ind.	Nov. 28
Dec. 2.	Sewer,	Wausau, Wis.	Nov. 28
Dec. 2.	Bridge,	Concord, N. C.	Nov. 28
Dec. 2.	Bridge,	Beattyville, Ky.	Nov. 28
Dec. 2.	Heating, etc.,	New York, N. Y.	Nov. 28
Dec. 2.	Sewer,	Santa Clara, Cal.	Nov. 28
Dec. 2.	Mechanical stokers,	Kansas City, Mo.	Nov. 28
	Advertised, Engineering News, Nov. 28.		
Dec. 2.	Water testing well,	St. Paul, Minn.	Nov. 28
Dec. 2.	Boilers, etc. (w.-w.),	Kansas City, Mo.	Nov. 28
	Advertised, Engineering News, Nov. 28.		
Dec. 3.	Bridge,	Olympia, Wash.	Nov. 28
Dec. 3.	Sewer,	Trenton, N. J.	Nov. 28
Dec. 3.	Sewers,	Jersey City, N. J.	Nov. 28
Dec. 3.	Electric plant, etc.,	Minneapolis, Minn.	Nov. 28
Dec. 3.	Sewers,	Pomona, Cal.	Nov. 28
Dec. 3.	Paving,	Buffalo, N. Y.	Nov. 28
Dec. 3.	Bridge,	Rhinelander, Wis.	Nov. 28
Dec. 3.	Fireproofing,	St. Paul Minn.	Nov. 28
Dec. 3.	Paving,	Trenton, N. J.	Nov. 21
Dec. 3.	Paving,	Beaumont, Tex.	Nov. 21
Dec. 3.	Church,	Richford, Vt.	Nov. 14
Dec. 3.	Sidewalks, etc.,	Jeffersonville, Ind.	Nov. 7
Dec. 3.	Conduit system,	Clinton, Ia.	Oct. 24
Dec. 3.	Coaling station,	Manila, P. I.	June 20
Dec. 4.	Self-propelling wagons, etc.,	London, Eng.	June 20
Dec. 4.	Removing wreck,	Tampa, Fla.	Nov. 14
Dec. 4.	Gravel roads (2.4 miles),	Petersburg, Ind.	Nov. 21
Dec. 4.	Bridge,	Greensboro, Ga.	Nov. 21
Dec. 4.	Grading and draining,	Newburg, O.	Nov. 21
Dec. 4.	Repair shop,	New York, N. Y.	Nov. 28
Dec. 4.	Building,	Baltimore, Md.	Nov. 28
Dec. 4.	Filling in,	Annapolis, Md.	Nov. 28
Dec. 4.	School,	Dedham, Mass.	Nov. 28
Dec. 4.	Macadamizing, etc.,	San Rafael, Cal.	Nov. 28
Dec. 5.	Dam,	Webb, N. Y.	Nov. 28
Dec. 5.	Sewers,	Fort Wayne, Ind.	Nov. 28
Dec. 5.	Bridges,	Fairbury, Neb.	Nov. 28
Dec. 5.	Power station,	Gloversville, N. Y.	Nov. 28
Dec. 5.	Bridge,	New York, N. Y.	Nov. 28
Dec. 5.	Bridge,	Buffalo, N. Y.	Nov. 28
Dec. 5.	Gravel roads (13 miles),	Indianapolis, Ind.	Nov. 21
Dec. 5.	Box lockers (5,000),	Jeffersonville, Ind.	Nov. 14
Dec. 6.	Dry-dock, etc.,	Hull, England.	Nov. 7
Dec. 6.	University building,	Norman, Okla. Ter.	Nov. 21
Dec. 6.	Sewage pumping engines (4),	Chicago, Ill.	Nov. 21
	Advertised, Engineering News, Nov. 21.		
Dec. 6.	Paving, etc.,	Cincinnati, O.	Nov. 21
Dec. 6.	Paving,	Buffalo, N. Y.	Nov. 28
Dec. 6.	Paving, etc.,	New York, N. Y.	Nov. 28
Dec. 7.	Bridge,	Cincinnati, O.	Nov. 21
Dec. 7.	Water-works,	Arthur, Ill.	Nov. 21
Dec. 7.	Electric lighting,	Seattle, Wash.	Nov. 21
Dec. 7.	Wrought-iron bridge,	Cincinnati, O.	Nov. 21
Dec. 7.	Quay wall,	Washington, D. C.	Nov. 14
Dec. 9.	Ball-joint water pipe,	Atlantic City, N.J.	Nov. 21
	Advertised, Eng. News, Nov. 21 and 28.		
Dec. 9.	Garbage crematory,	Newport News, Va.	Nov. 21
Dec. 9.	Telephone franchise,	Los Angeles, Cal.	Nov. 21
Dec. 9.	Drill hall, etc.,	Troy, N. Y.	Nov. 28
Dec. 9.	Water-works,	Ft. Washington, Md.	Nov. 28
	Advertised, Eng. News, Nov. 28 and Dec. 5.		
Dec. 10.	Water-works,	Riverdale, Ill.	Nov. 28
Dec. 10.	Sewerage system (7 mls.),	New Castle, Ind.	Nov. 28
Dec. 10.	Water supply,	Wilmington, O.	Nov. 14
	Advertised, Eng. News, Nov. 14 and 21.		
Dec. 11.	Orphanage,	Mason City, Ia.	Nov. 21
Dec. 11.	Removing, etc., garbage,	etc., Cincinnati.	Nov. 28
Dec. 11.	Removal, etc., dead animals,	Cincinnati, O.	Nov. 28
Dec. 11.	Paving, etc.,	Hoboken, N. J.	Nov. 28
Dec. 11.	City hall,	Bridgeport, Conn.	Nov. 28
Dec. 12.	Garbage crematory,	Dallas, Tex.	Nov. 21
	Advertised, Eng. News, Nov. 21 and 28.		
Dec. 12.	School,	Pittsburg, Kan.	Nov. 21
Dec. 12.	Beacon,	Galveston Bay, Tex.	Nov. 14
	Advertised, Eng. News, Nov. 14 and 21.		
Dec. 12.	Electric plant,	Wilmington, O.	Nov. 14
	Advertised, Eng. News, Nov. 14 and 21.		
Dec. 12.	Bridge,	Saginaw, Mich.	Oct. 31
Dec. 12.	Water-works,	Hattiesburg, Miss.	Nov. 28
Dec. 13.	Bridge,	West Bay City, Mich.	Nov. 28
Dec. 13.	Bridge superstructure,	Covington, Ind.	Nov. 28
Dec. 14.	Sewers (3 miles),	Seattle, Wash.	Nov. 28
Dec. 14.	Bridges,	Vincennes, Ind.	Nov. 28
Dec. 14.	Bridges (2),	Des Moines, Ia.	Nov. 14
	Advertised, Eng. News, Nov. 14 and 21.		
Dec. 14.	Paving,	Newport News, Va.	Nov. 21
	Advertised, Eng. News, Nov. 21 to Dec. 5.		
Dec. 14.	Road improvement, etc.,	Cincinnati, O.	Nov. 21
Dec. 16.	Water-works,	Trinidad, Colo.	Nov. 21
	Advertised, Eng. News, Nov. 21 and 28.		
Dec. 16.	Light-house,	Baltimore, Md.	Nov. 21
	Advertised, Engineering News, Nov. 21.		
Dec. 16.	School,	San Marcos, Tex.	Nov. 21
Dec. 16.	Ry. viaduct,	Ireland.	Nov. 7
ec. 16.	Garbage crematory,	Newport News, Va.	Nov. 28
Dec. 16.	Bridge,	Boise, Idaho.	Nov. 28
Dec. 16.	Bridge pier and approaches,	Kenosha, Wis.	Nov. 28
Dec. 16.	Sewerage system, etc.,	Washington, D. C.	Nov. 28
Dec. 16.	Lock gates,	Cincinnati, O.	Nov. 28
Dec. 17.	Bridge,	Saginaw, Mich.	Nov. 28
Dec. 17.	Library,	Mankato, Minn.	Nov. 28
Dec. 17.	Pumping plant,	New York, N. Y.	Oct. 24
Dec. 17.	P. O. building,	Creston, Ia.	Nov. 14
Dec. 18.	Filter plants,	Philadelphia, Pa.	Nov. 14
Dec. 18.	Reservoirs, etc.,	Philadelphia	Nov. 14
Dec. 20.	Water bonds,	Houma, La.	Nov. 21
Dec. 20.	Court house,	Des Moines, Ia.	Nov. 21
Dec. 20.	Portable wall telephones,	Washington, D.C.	Nov. 28
Dec. 20.	Paving,	Houston, Tex.	Nov. 28
Dec. 20.	Bridge,	Memphis, Tenn.	Nov. 28
Dec. 20.	Church,	Carbondale, Ill.	Nov. 28
Dec. 21.	Street improvements,	Cincinnati, O.	Nov. 28
Dec. 21.	Bridge supr. and aprchs,	Cincinnati, O.	Nov. 28
Dec. 21.	Water mains,	New York, N. Y.	Nov 28
Dec. 21.	Coaling plant,	Washington, D. C.	Nov. 7
Dec. 23.	Electric light franchise,	San Leandro, Cal.	Nov. 21
Dec. 24.	Water tunnel, etc.,	Cincinnati, O.	Nov. 28
	Advertised, Eng. News, Nov. 28 to Dec. 19.		
Dec. 26.	Artesian well,	San Jose, Cal.	Nov. 28
Dec. 28.	Boilers (2),	Bremerton, Wash.	Nov. 28
Dec 28.	Coal handling plants,	San Juan, P. R.	Nov. 28
Jan. 2.	Dredging,	Chicago, Ill.	Nov. 7
Jan. 6.	Railway bridge,	Victoria, B. C.	Nov. 14
Jan. 7.	Wiring P. O.,	Salem, Ore.	Nov. 21

Jan. 7. Drainage ditches, Bloomfield, Mo.....Nov. 28
Jan. 8. Bridge, New Westminster, Cal.....Nov. 21
Advertised, Eng. News, Nov. 21 to Dec. 12.
Jan. 10. Harbor work, Rosario, Argentine Republic. Apr. 18
Jan. 14. Light station, Lincoln Rock, Alaska.....Nov. 21
Advertised, Eng. News, Nov. 21 and 28.
Jan. 22. Electric plant, etc., New Orleans, La.....Nov. 28
Advertised, Eng. News, Nov. 28 to Dec. 19.
Jan. 22. Pumping plant, etc., New Orleans, La.....Nov. 28
Advertised, Eng. News, Nov. 28 to Dec. 19.
Jan. 31. Electric plant, etc., New Orleans, La.....Nov. 28
Feb. 15. Auditorium, Omaha, Neb.....Oct. 3
Feb. 28. Bridge, Sydney, N. S. W.....June 20
Advertised, Eng. News, June 20 to July 11.
Mar. 31. Electric trmwys, Rockhampton, Queensland. Oct. 31
Sept. 1, 1902. Bridge plans, St Petersburg, Russia..Sept. 19
Advertised, Eng. News, Sept. 19 to Oct. 3.
No date. Machine shop, Niagara Falls, Ont.....Oct. 24
Advertised, Eng. News, Oct. 24 and 31.
No date. Drainage canals (620 mls), Argentine Rep. Nov. 7
No date. Telegraph line, Ottawa, Ont.....Nov. 21
" Sewer, Toronto, Ont.....Nov. 21
No date. Bridge, Erie, Ill.....Nov. 28
" . Fire engine, Logansport, Ind.....Nov. 28
" . Irrigation canal, Abbeville, La.....Nov. 28
Advertised, Eng. News, Nov. 28 to Dec. 19.

RAILWAYS.

ABERDEEN & ROCKFISH.—John Blue, Pres., Aberdeen, N. C., informs us that this company will build two miles of road at this time, but will probably do further work in this line at some future date. The construction will be done by the company.

AVA NORTHERN.—J. A. G. Reynolds, Ava, Mo., writes that preliminary surveys are completed and the permanent location will be finished in about 10 days. Part of the right of way has been obtained. The capital is not entirely secured. This line will be 14 miles long. W. J. Turner, Pres., Ava; C. G. McCloon, Ch. Engr., Kansas City, Kan.

BALTIMORE & OHIO.—Orders will be placed by this company for the following equipment for delivery in 1902, according to reports: 50 locomotives, 85 passenger cars and 6,000 freight cars. The cost of these will approximate $7,000,000. The rail order for 1902 is about 55,000 tons. E. H. Bankard, Pur. Agent, Baltimore, Md.

BALTIMORE & OHIO.—J. M. Graham, Ch. Engr., Baltimore, Md., informs us that nothing has been done regarding the proposed yard at Glenwood, Pa., or branch from Mannington, W. Va., to Smithfield.

CAROLINA & NORTHWESTERN.—J. R. Erwin, Ch. Engr., Lincolnton, N. C., writes us that the South Atlantic Construction Co. is constructing 12 miles from Lincolnton down the South Fork River. The contracts have been let to Batcheller, Magruder & Co., J. T. Pruden, Virginia Bridge & Iron Co., and S. D. Donovan. The right of way has been secured.——Heavy rails are being distributed between Lenon, N. C., and Hickory, N. C., and the gage between those points will be changed during January and February next.

CHICAGO GREAT WESTERN.—It is stated that a contract has been let to Winston Bros., Minneapolis, Minn., for the grading of the extension to Omaha, between Carroll, Ia., and Harlan. It is stated that grading will probably not be started until spring.

CHICAGO, ROCK ISLAND & PACIFIC.—Two routes have been surveyed for the proposed Kansas City cut-off, one runs from Drakeville, Ia., to Trenton, Mo., 80 miles, and the other from a point near Floris, Ia., to Trenton, 88 miles. R. W. Day, Asst. Ch. Engr., Topeka, Kan.

COPPER RANGE R. R.—A contract has been closed with C. J. Johnson for enough ties for 50 miles of track. The line will be built next season from Houghton to Calumet, 14 miles, and from Mass City to Watersmeet, 25 or 30 miles.

GARFIELD-MORRIS.—Reports state that the survey of this road from Phalanx, O., to Fairport is completed. The grading, it is stated, will commence at once. The route extends along the course of the Grand River.

HALIFAX & SOUTH WESTERN.—H. K. Wicksteed, Ch. Engr., Bridgewater, N. S., writes that preliminary survey have been completed for nearly the entire length of the road, 180 miles. The capital is assured under certain conditions which are not fully settled at this time. No active construction will be undertaken until the spring. The line will touch the following points: Halifax, Chester, Bridgewater, Liverpool, Shelburne and Yarmouth. McKenzie, Mann & Co., of Toronto, Ont., are at the head of the enterprise.

JACKSONVILLE & LAKE WORTH.—Application has been made by this company for incorporation, in Florida, its purpose being to build and operate a line of railway from Jacksonville to a point east of Lake Worth, touching at the last-named place. This company will be capitalized at $20,000, with the privilege of increasing the capital stock to $3,000,000. Wm. M. Lanehart, Hiram F. Hammon and George W. Lainhart, all of West Palm Beach, Fla., are interested.

KIOWA, CHICKISHA & FORT SMITH.—A. J. Hemstreet, Paulo Valley, Ind. Ter., advises us that the contract for this road has been let to John Scott & Sons, St. Louis, Mo., and work has been started. The entire right of way has been secured. The line is being built and will be operated by the Atchison, Topeka & Santa Fe Ry. system. It will be 25 miles in length. James Dun, Ch. Engr., Chicago, Ill.

LONG BRANCH COAL & R. R. CO.—Application has been made in Alabama for permission to build a spur track from the Gurley Branch of the Birmingham Mineral R. R. The line will be seven miles long and will run through the Long Branch coal fields. J. H. Ellis, G. W. Jones and J. H. Ringgold, of the L. & N. R. R., are interested.

MINERAL SPRINGS R. R.—The American Association has been granted the right of way for this road through Middlesboro, Ky., by the council of that city. The line, it is said, will be built from that place to Harriranft, Tenn., where the Southern Ry. will join it with a new road from Lafayette.

MINNESOTA.—It is announced that a line will be built from Solway north to Red Lake and that contracts will be let at once. The names of the parties in back of the project are not known at this time, but, it is stated, that the Great Northern R. R. was interested in the plan.

NEW ORLEANS & MISSISSIPPI MIDLAND.—A charter has been filed by this company in Louisiana to build a road from Lake Pontchartrain and traverse the ozone and pine belts to Pontotoc, Miss., a distance of 340 miles. The company is capitalized at $2,000,000. Percy L. McCoy, Pres., New Orleans; Robt. P. Duncan, Vice-Pres., New York.

ONTARIO.—J. D. McLean, Secy. Dept. Indian Affairs, Ottawa, has asked for tenders for 25,000 cedar ties and 10,000 cedar posts, 8 ins., to the Indians of Manitoulin Island during the coming winter, according to reports.

OREGON & SOUTHWESTERN.—Incorporated in Maine with a capital stock of $1,000,000, to operate railroads. Josiah C. Ward, Pres.; Benj. G. Ward, Treas., Portland, Me.

PENNSYLVANIA R. R.—It is stated that the expenditures to be made by the company in 1902 for rolling stock will aggregate $25,000,000. Of this amount $19,000,000 will be expended for cars and the remaining $6,000,000 for locomotives.——An extension of the block signal system now in operation on the New York, Atlantic City & Philadelphia divisions, to the Maryland division, taking in a portion of the Philadelphia, Wilmington & Baltimore R. R., is said to be contemplated.

PITTSBURG, BESSEMER & LAKE ERIE.—A contract has been let to the Patton & Gibson Co., of Pittsburg, Pa., for a quantity of excavation and filling in the yards of the company at Unity, Pa.

SAN DIEGO-EASTERN.—H. T. Richards, Ch. Engr., has submitted his report of the survey as far as made, 50 miles, and reports easy grades, the highest percentage being 1.4. San Diego, Cal., will probably be the headquarters of the company.

TENNESSEE.—Reports state that surveys have been made for a line of railway from Petros to Oliver Springs to be constructed by the state as an outlet for the state mines at Brusby Mountains. The line will be six miles long and will connect with the Southern Ry. at Oliver.

TEXAS CENTRAL.—C. Hamilton, Ch. Engr., Waco, Tex., informs us that the recent reports stating that a new depot and freight station were to be built at Waco were erroneous. The company will make some repairs and extensions but no new construction will be undertaken.

UNION SPRINGS & NORTHERN.—Wm. Blount, Pres. Union Spring, Ala., writes us that 7½ miles has been completed, and that the balance of the contract to Milstead, Ala., 20 miles, will soon be let. The line when completed will run from Fort Davis, Ala., to Milstead and Birmingham, 120 miles.

YAZOO & RIVERSIDE.—A charter has been issued to this road in Mississippi. The projected road will have Yazoo City and Riverside as its terminal points, and will traverse portions of Yazoo and Sharkey counties. R. L. Bennett, W. A. Henry and B. Willard are interested.

STREET AND ELECTRIC RAILWAYS.

SOUTH FRAMINGHAM, MASS.—A charter has been issued to the Boston & Worcester St. Ry., capitalized at $750,000. The company has secured locations in the various cities and towns from Worcester to Brookline, with the exception of Wellesley.

WORCESTER, MASS.—The Worcester & Boston St. Ry. is to build its power house at South Framingham and not at Natick, as at first planned.

ALBANY, N. Y.—The Hudson Valley Ry. Co. has been authorized by railroad commissioners to increase its capital stock from $2,600,000 to $3,000,000. It proposes to construct a new line from Ballston to Mechanicsville.——The Massena & Raymondsville Electric R. R. Co. has been incorporated to operate an electric road from Massena to Raymondville. The capital stock is $80,000. W. J. McKinney, H. H. Warren and W. J. Patch, Massena, are interested.

ALBANY, N. Y.—The Interurban St. Ry. Co. of Mount Vernon has been incorporated, with a capital stock of $500,000, by Andrew A. Halsey, Michael J. Kennedy and Wm. J. Shedwell, Brooklyn, N. Y.

GLOVERSVILLE, N. Y.—J. N. Shannahan, Engr. Fonda, Johnstown & Gloversville R. R., Gloversville, N. Y., informs us that the date of receiving bids for the construction of the new power station near Tribes Hill has been extended until Dec. 5.

HERKIMER, N. Y.—Press reports state that engineers are now surveying the Herkimer, Mohawk, Ilion & Frankfort Electric Ry., with a view of establishing double tracks.

NEW YORK, N. Y.—The Rapid Transit Subway Construction Co. has purchased the property at 110-12 East 19th St. for a site for a sub-power station. The new station will be not more than 70 ft. in height, costing about $70,000.

ROCHESTER, N. Y.—A. L. Parker, Gen. Mgr., Chamber of Commerce Bldg., Detroit, Mich., writes that right of way, surveys and the construction capital are all finished with and contracts will be let about the first of the year. The Detroit Construction Co. will do the work. The line will be a 45-mile electric running from this city through Pittsford, Fairport, Victor, Canandaigua and Geneva. John Winter, Pres.

NEWARK, N. J.—Edward M. Waldron & Co. have received the contract for building the power station for the Jersey City, Hoboken & Paterson St. Ry. at Hackensack and New Durham.

TRENTON, N. J.—The New Jersey & Pennsylvania Traction Co. has filed articles of incorporation, with a capitalization of $1,000,000. Charles M. Bates, Allentown, Pa.; Lewis S. Dunham, Wilmington, Del., and J. J. Coleman, Trenton, are interested.

DOYLESTOWN, PA.—It is stated that the contract for the erection of the power plant for the Doylestown & Eastern Electric Ry. at Raubsville has been awarded. The work of track laying and grading in the vicinity of Ottsville is progressing rapidly. About eight miles of track has already been laid. H. M. Herbert & Co., Bound Brook, N. J., are the general contractors.

BALTIMORE, MD.—The Baltimore & Laurel Electric Ry. has been organized by the officials of the United Rys. for the purpose of building a line to Laurel, Prince George's county. The company is capitalized at $250,000, and will build a line via Relay to Laurel, a distance of 18 miles, passing through Baltimore, Howard, Anne Arundel and Prince George's counties. George R. Webb, Pres.; Wm. A. House, Vice-Pres. and Gen. Mgr.

CULPEPER, VA.—The Eastern Virginia Construction Co. has appointed a committee to ascertain if a more feasible route can be obtained for its electric road from the Tidewater section around Fredericksburg to Washington, running through Culpeper county.

RICHMOND, VA.—The Virginia Electrical Ry. & Development Co. has closed a contract with the Electric Storage Battery Co., of Philadelphia, for a storage battery plant.

THURMOND, W. VA.—S. G. Walker, Thurmond, informs us that the surveys and rights of way have been obtained for the line of the Kanawha, Glen Jean & Eastern R. R., and grading is under way. The capital for construction is secured. The line will be 12 miles long, and will run by way of Thurmond, Harvey, Red Star, Glen Jean, Sun, Macdonald, etc. It will be operated by electricity. J. G. McKell, Pres., Chillicothe, O.; Thos. Nichol, Ch. Engr., Glen Jean, W. Va.

KIMBERLAIN HEIGHTS, TENN.—We are informed that the surveys and rights of ways for the Knoxville, Kimberlain Heights & Sevierville Electric R. R. are nearing completion, and that the construction capital is in sight. It is not stated when operations will be started. Ashley S. Johnson, Pres.

GREENEVILLE, TENN.—An electric railway is to be built from Greeneville to Tusculum by W. H. Moore, Pres. National Good Roads Association, according to reports.

NASHVILLE, TENN.—C. E. France, representing Toledo, O., capitalists, is now looking over the route of a proposed electric railway from Murfreesboro to Eagleville.

LEXINGTON, KY.—The Georgetown & Lexington Traction Co. is preparing to begin a survey for an electric line to Paris.——Articles of incorporation have been filed by the Blue Grass Consolidated Traction Co., according to reports. The first road out of this city will be commenced in the spring.

CLEVELAND, O.—The Eastern Ohio Traction Co., of Cleveland, has been incorporated, with a capital stock of $1,000, for the purpose of constructing an electric railway from this city along the Mayfield Road through Cuyahoga, Geauga, Portage and Trumbull counties to Leavittsburg. Branch lines will be built as follows: From Fullerton to Chardon, from Punderson Lake to Middlefield, from South Newbury to Chagrin Falls and Kinsman St. in Cleveland, from Sted's Crossing to Middlefield. F. A. Henry, H. B. Potter and A. A. McCaslin are incorporators.

COLUMBUS, O.—The Western Ohio Ry. Co., of Lima, has increased its capital stock from $1,000,000 to $3,000,000. It will build new lines from Wapakoneta to Shelby, from St. Marys to Celina and thence west to the state line. F. D. Carpenter, Gen. Mgr., Lima.

TOLEDO, O.—The Toledo, Hicksville & Ft. Wayne R. R. has filed articles of incorporation, with a capital stock of $15,000. The company proposes to build and operate an electric railway from this city through the counties of Lucas, Fulton and Defiance to the state line between Ohio and Indiana. A. K. Detwiler, John Q. Files and James Donnelly are interested.

XENIA, O.—W. D. Riddell, Ch. Engr., Hamilton, Eaton & Richmond Traction Co., informs us that surveys are completed and the right of way obtained for the company's 45 miles of electric road, running from Hamilton through Seven Miles, Gratis, Eaton, Boston to Richmond. The line is at present in the hands of the Osborn Engineering Co., Cleveland. John J. Hall, Pres., Dayton.

INDIANAPOLIS, IND.—The Indianapolis & Eastern Traction Co. has purchased a controlling interest in the Indianapolis & Greenfield Rapid Transit Co.'s line, and will immediately extend the line to Richmond and possibly into Ohio. Arrangements have been made with the Central Trust Co. of this city for financial assistance. Work on the extension will begin at once.

MUNCIE, IND.—C. E. Munn, representing the consulting engineer in charge of the survey work of the Muncie, Hartford City & Fort Wayne Traction Co., is reported as stating that the company will locate its power houses, car barns and shops in Eaton, 10 miles north of this place. The power house will cost about $125,000.

ALPENA, MICH.—Reports from this place state that the contract for the building of the Alpena & Western Ry. from Alpena to Charlevoix has been let to Albert Lawrence, New York. Mr. Lawrence will commence work at once on the line. To build and equip the entire road will require about $3,000,000. The line will traverse a hardwood timber belt.

FLINT, MICH.—E. O. Wood and D. D. Aitkin, of this place, are promoting an electric railway from this city to Flushing, a distance of 11 miles. Geo. E. Currie, of Detroit, is back of the scheme.

LA SALLE, ILL.—The La Salle-Peru Electric Ry. has been purchased by W. V. Coons, of the Streator Electric Ry., and his associates. The company has acquired the right of way between Peru and Spring Valley and will extend the line at once to that place.

MACOMB, ILL.—It is reported that the charter for an electric railway from this place to Beardstown has been secured under the name of the Macomb & Western Illinois R. R. It will be extended northward from Macomb to Monmouth.

KENOSHA, WIS.—G. R. McDonald, Secy. Wisconsin Inter-Lakes Ry., informs us that the surveys have been made for six miles west from this city, and building operations between Kenosha and Truesdell will begin in the spring. The line will be 30 miles in length. G. L. Clausen, Ch. Engr., 164 La Salle St., Chicago; P. F. Haynes, Pres., 86 La Salle St., Chicago.

MILWAUKEE, WIS.—The Northwestern Electric Ry., capitalized at $25,000, has been incorporated by C. A. A. McGee, H. F. Cachems and W. J. Scanlon, to build electric railway lines in Manitowac and Sheboygan counties.

DES MOINES, IA.—J. B. Coffinberry and George F. McKay, Cleveland, O., are interested in the plan to build an electric railway from Des Moines to Colfax, and possibly further. The road will be capitalized at $1,500,000.

TOPEKA, KAN.—The charter for the Kansas City & Olathe Electric Ry. has been granted at Topeka. The charter calls for an electric line from either Kansas City, Kan., Argentine or Rosedale to Olathe. F. C. Goodwin, Pres., Kansas City, Mo.

STEVENSVILLE, MONT.—George T. Braggs, Stevensville, writes that the right of way over town and county roads for the line of the Stevensville Ry., Light & Power Co. have been secured and those over private way are now being taken. The construction will not be started before spring.

BELTON, TEX.—The council has granted a franchise to H. M. Carter, of Dallas, for an electric railway between Belton and Temple. As soon as a franchise can be secured from Temple the work will be started.

HOUSTON, TEX.—The Houston Electric Ry. Co. has reorganized and passed into the hands of its new owners. It is expected that a system of extensive improvements will be inaugurated soon after the arrival of the new management. The directors have elected temporary officers as follows: George J. Baldwin, Pres., Savannah, Ga.; J. W. Payne, Secy.; W. B. Chew, Treas.

NORMAN, OKLA.—The Oklahoma & Indian Territory Electric Ry. will build an electric line from Lawton, Okla., through South McAlister, Ind. Ter., via Sulphur Springs, a total distance of 170 miles. Ed. B. Johnson, Pres. John H. Mosier, Audr. and Secy., Norman, writes as follows regarding the proposed road: "Preparations are now being made to commence the surveying and permanent location of this line. The first of the line to be built will be from a point on the Santa Fe to Sulphur Springs, and it is intended to have this part of the line in operation by June 1 next. Work will be pushed until the line is completed and the coal and asphalt mines of the Indian Territory and the fine agricultural lands west to Lawton are connected. Contracts for construction will be let about Jan. 1."

BAKER CITY, ORE.—The county court has granted a franchise to Seymour Bell to construct an electric road for transportation of freight and passengers between Sumpter and Bourne. It is the purpose of absorbing the Sumpter light plant, enlarge it and use that for the generation of power. The cost of enlarging the power house and constructing the line will be about $150,000.

OAKLAND, CAL.—The Oakland & San Jose R. R. has filed articles of incorporation; capital stock, $2,500,000. The company intends building a line from Haywards to San Jose, about 50 miles, and also to build three branch roads, one from San Jose to Las Gatos, 15 miles, the other from San Jose to Saratoga, 15 miles, and the third from San Jose to Santa Clara, three miles, or a total of 83 miles. The privilege of using either steam or electricity for motive power is allowed the company, although it proposed to use electricity. Three surveys in different directions will be started at once and when completed the most feasible route will be selected. Frank M. Smith, F. C. Havens, W. H. Martin and W. F. Kelly are interested.

MONTREAL, QUE.—The Montreal St Ry. has applied for a permit to erect a $32,000 building on Barre St., St. Ann's Ward.

STRATFORD, ONT.—G. G. McPherson, K. C., has asked the mayor for a franchise for a street railway in this city. Application will be made for a charter at the coming session of the legislature. The line will run from Stratford to Mitchell. It will be operated by electricity and be used for freight and passenger traffic.

ELECTRIC LIGHT AND POWER.

NORTH ADAMS, MASS.—The E. G. Bernard Co., of Troy, N. Y., has been awarded the contract by the North Adams Gas Co. for an electric light plant.

BROOKLYN, N. Y.—Bids are asked by the board of education, Park Ave. and 59th St., Manhattan, until Dec. 2 for installing an electric plant, heating and ventilating apparatus, etc., in Balzar Hall.

HOLLEY, N. Y.—An election was held Nov. 15 to vote on the question of issuing $15,000 in bonds for an electric plant.

PORT JERVIS, N. Y.—Reports state that the Erie R. R. Co. proposes to build a new electric plant in Port Jervis or remove the one at Dunmore to Port Jervis.

SCHOHARIE FALLS, N. Y.—The Empire State Power Co. has completed plans and specifications for a 140-ft. timber extension to the dam and an extension to the dike.

McKEESPORT, PA.—The councils have defeated the ordinance authorizing the issuance of $450,000 in bonds for a municipal plant.

MEYERSDALE, PA.—H. J. Wilmoth is reported to have purchased the light plant for $30,000, which it is proposed to enlarge and improve.

READING, PA.—The People's Light Co. is reported to have asked for bids for installing an electric plant.

BELINGTON, W. VA.—D. P. Teter has asked for a 20-year franchise for a gas plant.

CHARLESTOWN, W. VA.—The Shenandoah Electric Power & Light Co., recently organized, is reported as making arrangements for the construction of its plant at Millville. W. O. Norris, Gen. Mgr.; Lloyd Lowndes, Pres., Cumberland, Md.

ASHEVILLE, N. C.—Ladshaw & Ladshaw, of Spartanburg, N. C., are reported as preparing plans for a power plant of 3,500 HP., a cotton mill factory, etc., on the French Broad River for the W. T. Weaver Power Co.; estimated cost, about $500,000.

GOLDSBORO, N. C.—The city has purchased the electric plant for $25,000. The water committee has been directed to engage an engineer to make a valuation of the water-works, with a view to the city's purchasing it. F. K. Borden, Chn. Light Com.

BENNETTSVILLE, S. C.—Reports state that this place proposes to issue $12,000 in bonds for an electric plant. F. W. Bouchier, Chn. Com.; Milton McLaurin, Clk.

AUGUSTA, GA.—P. C. O'Gorman has offered to buy the franchise for an electric plant recently granted to Stewart Phinizy.

BESSEMER, ALA.—The Bessemer Electric Co. has transferred its property to the Birmingham Ry., Light & Power Co., who propose to extend the plant, etc.

MOBILE, ALA.—The Mobile Gas, Light & Coke Co. has asked for a new franchise.——The electric light company has increased its capital to $300,000.

NEW ORLEANS, LA.—Bids are asked until Jan. 22 for furnishing the materials and for constructing an electric plant, pumping station, etc., for the drainage system, as described in our advertising columns. R. M. Walmsley, Pres. Drainage Comn.; Irwin Jamison, Secy. ——Propositions will soon be wanted by the council for a municipal lighting plant, and also lighting the city for ten years, at the end of which time the plant is to become the property of the city.

BILOXI, MISS.—An election will soon be held to vote on the question of issuing bonds for the purchase of the electric plant and water-works.

LOUISVILLE, KY.—A committee of the Louisville Commercial Club has reported on a project for a power plant and a tunnel at the Ohio Falls, to cost about $200,000. E. H. Mark, Chn. Com.

COLUMBUS, O.—The trustees of the State Institution of the Blind proposes to install an electric plant, to cost $9,000, and a new heating plant, to cost $25,000, at the state institution.

TOLEDO, O.—Local papers state that A. K. Detwiler, of the Toledo, Hicksville & Fort Wayne R. R. Co., recently incorporated with a capital of $15,000, proposes to build an electric plant in this city.

NEW ALBANY, IND.—Wesley B. Perry has asked for a 46-year franchise for a heat and light plant and water-works.

CALUMET, MICH.—A council committee has been appointed to investigate the question of building an electric plant. Address Samuel Eddy and T. Belhuhlur.

CONSTANTINE, MICH.—Reports state that plans have been completed for an electric plant.

LAKE LINDEN, MICH.—The question of building a municipal plant is reported as being considered.

MARSEILLES, ILL.—W. D. Boyce has asked the court to order the Marseilles Land & Water Power Co. to construct a headrace to increase its water power.

MOLINE, ILL.—The People's Power Co. is reported preparing plans for increasing the power station and gas plant. C. H. Deere, Pres.

LA CROSSE, WIS.—Mayor Joseph Boschert has signed the ordinance granting a 25-year extension to the franchises of the Edison Light & Power Co. and to the Central company.

MERRILL, WIS.—The Merrill Ry. & Lighting Co., it is stated, propose to improve its plant, at a cost of about $40,000.

MILWAUKEE, WIS.—Alderman Henry Smith, 766 Booth St., writes us that the ordinance to issue $150,000 in bonds for beginning an electric light and power plant in this city is now in the hands of the city comptroller for his counter signature, and will be reported back to the council for action on Dec. 2.

OSHKOSH, WIS.—A. E. Thompson, Receiver Oshkosh Electric Light & Power Co., has been granted permission to issue $60,000 in bonds for extending the plant.

SUPERIOR, WIS.—The contracts will be let at once by the Superior Water, Light & Power Co. for improving its plants, at a cost of about $35,000, according to reports.

MINNEAPOLIS, MINN.—F. L. De Carrie, of Montreal, Que., who built the garbage crematory here, has submitted a plan for erecting an electric plant in connection with the crematory.——Bids are asked until Dec. 3 for a 160-HP. engine, 100-K-W. electric penerator, three electric motors, etc., for court house and city hall. Long & Kees, Archs., 605 Kasoto Block.

WELLINGTON, KAN.—G. V. Hunter, Mayor, writes us that this city has voted bonds for an electric plant. Bids will be asked as soon as the plans and specifications are completed. The council will employ an engineer at once.

OMAHA, NEB.—J. E. Riley, promoter, Omaha, writes us that bids will be asked next year by the Plattsmouth Power Canal Co. for constructing a power plant and canal on the north side of Platte River, commencing at Ashland, Neb., and running to Plattsmouth; estimated cost, about $1,750,000. The canal as designed is 24 miles long, and will take its water from the Platte and Elkhorn Rivers. There will be a capacity of 1,250 ft. per second, a fall of 63½ ft., which will give 15,000 HP. for ten hours and about 3,500 HP. the remainder of the day. W. J. McEathran and Chas G. Carpenter, Engrs.; R. B. Howell, Consult. Engr., Omaha, Neb.

BUTTE MONT.—The Montana Power Co. is reported to have been granted a franchise for a power line in Silver Bow county. L. L. Minn, Gen. Mgr., Butte.

BEVIER, MO.—It is proposed to issue $10,000 in bonds for an electric plant.

SCHULENBURG, TEX.—Reports state that the electric plant belonging to Alderman L. E. Miller and the cotton gin belonging to W. H. McKinnon have been destroyed by fire.

SEATTLE, WASH.—Resolutions have been introduced looking to the submission to the voters at the coming election of a proposition for the construction of a municipal electric lighting plant. The plant which it is proposed to build will cost about $200,000, and the plan now is to establish it in Cedar River, using water power for the generation of electricity.

TACOMA, WASH.—Bids are reported as being asked by Commissioner of Public Works Clark for lighting the city for five years.

BAKERSFIELD, CAL.—Bids are asked until Dec. 2 for a franchise for a power line, etc., such a franchise having been applied for by Leroy Peyton. A. G. Lightner, Cy. Clk.

HAYWARDS, CAL.—An election will soon be held to vote on the question of issuing $15,000 in bonds for purchasing the electric plant.

LOS ANGELES, CAL.—The Kern Power Co., recently incorporated, with a capital of $5,000,000, by H. E. Huntington, I. W. Hillman, A. Borel, A. Haas and Kaspare Cohn, proposes to build power plants on the Kern River in Southern California. Work on the main plant, at Kernville, will begin at once.

MARE ISLAND, CAL.—We are informed that M. T. Endicott, Ch. Bureau Yards and Docks, Navy Dept., Washington, received the following bids Nov. 23 for three 200-HP. boilers at the navy yard, Mare Island: (1) being for the three boilers complete; (2) for plant of two boilers; estimated cost, $15,000: Risdon Iron & Locomotive Works, San Francisco, (1) $26,825, (2) $22,305; Charles C. Moore & Co., San Francisco, (1) $30,788, (2) $26,677.

OAKLAND, CAL.—The Suburban Electric Light Co. has been granted a 50-year franchise for building and operating an electric plant.

ONTARIO, CAL.—W. H. Sanders, of Pomona, Cal., has made surveys for a power plant in San Antonio Canyon for the San Antonio Water Co., to cost about $65,000.

BRIDGES.

MONTPELIER, VT.—Plans for a new structure to replace the Rialto bridge, on State St., have been submitted to Mayor Brown by the American Bridge Co. The bridge will cost about $10,000, and it is thought that the council will act on the matter at the March meeting.

QUINCY, MASS.—Reports state that preliminary plans for the Wellington bridge have been completed; estimated cost, $200,000.

SWAMPSCOTT, MASS.—J. P. Snow, Bridge Engr., B. & M. R. R., Boston, writes us that Dearborn Bros., Lynn, have been awarded the contract for the stone substructure of the wooden truss bridge, at $4,000, and that the superstructure will be built by the railroad force.

AMSTERDAM, N. Y.—The Amsterdam Bridge Co. has been awarded a contract by the Amsterdam St. R. R. Co. for constructing a 585-ft. bridge across the ravine at the foot of Tribes Hill.

BUFFALO, N. Y.—Bids are asked until Dec. 5 for constructing a swing bridge over Black Rock Harbor at Ferry St. John N. Partridge, Supt. Pub. Wks., Albany.

CINCINNATUS, N. Y.—It has been voted to build an iron bridge to replace the present structure across the Otselic River, at a cost of $6,000.

NEW YORK, N. Y.—Bids are asked until Dec. 5 for constructing a rolling lift bridge over Newtown Creek. John L. Shea, Comr. Bridges, 13 Park Row.

VERSAILLES, N. Y.—It is reported that the Otsego Bridge Co. has been awarded the contract for building the bridge over Cattaraugus Creek.

JOHNSTOWN, PA.—Reports state that the county commissioners will soon let a contract for a 50-ft. steel bridge over Yellow Creek between Greenville and Nolo.

NEW CASTLE, PA.—Plans are before Judge Wallace for constructing a viaduct at a cost of about $87,000.

PHILADELPHIA, PA.—The Pinkerton Construction Co. has been awarded a contract by the Morton & Swarthmore Electric R. R. for erecting a 100-ft. span steel bridge over Crum Creek and a 60-ft. span steel bridge over Wellingford Road.

WILKESBARRE, PA.—An amendment to an ordinance has been adopted appropriating $40,000 for constructing a bridge across the railroad tracks in North Wilkesbarre.

FREDERICK, MD.—C. T. Dougherty has been awarded a contract for building an iron and steel bridge across the Monocacy at Crist's Ford, at $14,500.

HYATTSTOWN, MD.—Reports state that a steel bridge is to be built at this place.

CONCORD, N. C.—Bids are asked until Dec. 2 for erecting an iron bridge across Rocky River. M. M. Gibson, Chn. County Comrs.

COLUMBUS, GA.—Preliminary surveys for the 750-ft. steel bridge across the river at 14th St. have been made and bids will be asked and the work started as soon as possible. Address City Engineer Johnson.

MOBILE, ALA.—W. T. Montfort, Ch. Engr., Louisville & Nashville R. R., is quoted as saying that the bridge at the Rigolets will be rebuilt and its capacity increased from 95,000 to 150,000 lbs.

MEMPHIS, TENN.—Bids are asked until Dec. 20 for constructing an iron and wood bridge across Wolf River on the Germantown and Fisherville Road. W. W. Berkedale, Supt. Bridges.

BEATTYVILLE, KY.—Bids are asked until Dec. 2 for erecting a 380-ft. iron bridge. W. L. Wheeler, Special Comr.

CINCINNATI, O.—Bids are asked until Dec. 21 for constructing the substructure and approaches of a bridge over Duck Creek in Columbia township. Eugene L. Lewis, County Audr.

CINCINNATI, O.—Bids are asked until Dec. 21 for repairing three bridges and their approaches on the Snyder road, Sycamore township. Eugene L. Lewis, County Audr.

COVINGTON, IND.—Bids are asked until Dec. 13 for constructing the superstructure of a 160-ft. two-span iron bridge across Coal Creek in Van Buren Township. F. M. Hilderbrand, Chn. County Comrs.

GREENFIELD, IND.—Bids are asked until Dec. 7 for constructing several small bridges. R. G. Wilson, County Comr.

VINCENNES, IND.—Bids are asked until Dec. 14 for erecting 17 steel highway bridges and stone abutments and piers. Fred. Samonial, Pres. County Comrs.; J. S. Spiker, County Engr.

PORT HURON, MICH.—Bids are asked until Nov. 30 for constructing a jack-knife bridge over Black River at Military St. R. D. O'Keefe, Supt. Pub. Wks.

SAGINAW, MICH.—Bids are asked until Dec. 17 for building a bridge at Genesee Ave. Hiram E. Terry, Cy. Clk.

WEST BAY CITY, MICH.—Bids are asked until Dec. 12 for constructing a bridge across Kawkawlin River. H. C. Thompson, Cy. Engr. Robert Cathcart, Town Clk.

ERIE, ILL.—Reports state that bids are asked by the highway commissioners for building an iron bridge and abutments across the county ditch.

KENOSHA, WIS.—Bids are asked until Dec. 16 for building center pier and approaches for the proposed Middle St. bridge. Gus Jacob, Cy. Clk.

RHINELANDER, WIS.—Bids are asked until Dec. 3 by the city clerk for constructing a three-span steel bridge across the Wisconsin River on the present piers; capacity, 80 lbs. to sq. ft., live load.

FAIRBURY, NEB.—Bids are asked until Dec. 6 by the county clerk for erecting and repairing all wooden and iron bridges needed in Jefferson county for a period of one year commencing Jan. 1, 1902.

OLYMPIA, WASH.—Bids are asked until Dec. 3 for constructing a bridge across Waddell Creek at Lovell's ford. A. L. Callow, Clk. County Comrs.

BOISE, IDAHO.—Bids are asked until Dec. 16 for building a steel and wood combination bridge across the Boise River at Eagle Island. M. W. Clark, Chn. County Comrs.

BUILDINGS.

BOSTON, MASS.—The following bids were received by the public buildings department on Nov. 22 for the new ward 16, municipal building: Morrill & Whitor, $96,960; Clark & Lee, $98,800; Howard Bros., $101,300; Miller Bros., $103,100.——Wm. E. Lincoln and John L. Behneke, as trustees of the Portland Trust, have secured land on Atlantic Ave., and will erect a 6-story building from plans by Chas. E. Park, Arch. The building will be of stone, equipped with freight and passenger elevators.

BOSTON, MASS.—Mrs. C. E. Sprague proposes to expend about $150,000 in remodeling, improving and enlarging her country house in Brookline.

DEDHAM, MASS.—Bids are asked until Dec. 4 for erecting a grammar school house on Cedar St., Oakdale District. Chas. H. Shriver, Chn. Bldg. Com.

BRIDGEPORT, CONN.—Bids are wanted by the committee on the new municipal building until Dec. 11 for the construction of a new City Hall building. Hugh Stirling, Chn.

BUFFALO, N. Y.—Bids for the building of the new armory of the 65th Regiment will be asked for next month. Maj. Geo. J. Metzger, Arch., 19 W. Huron St., is finishing plans and specifications, and when completed bids will be called for. The armory will be about 335 × 430 ft., built for 12 companies.

NEW YORK, N. Y.—Plans have been filed by Philip Goerlitz, 242 East 51st St., for a 10-story brick building at 10 Waverly Place, 25x83 ft., to cost $175,000. Alfred Zucker, Jr., 32 Waverly Place; by A. M. Race, 115 Broadway, for a 6-sty brick warehouse, 55 x 150 ft., at 68th St. and Ave. A, to cost $80,000. Louis Korn, Arch., 37 Maiden Lane; by Samuel Weil, for a 6-sty warehouse, 28 × 70 ft., at 137 Hudson St., costing $30,000. Louis Korn, Arch.; by Thomas Doherty, 69 Amsterdam Ave., for a 9-story brick hotel, 100 x 102 ft., at 79th St. and Amsterdam Ave., to cost $300,000. Henry Anderson, Arch., 1183 Broadway; by Albert Saxe, 92 Fifth Ave., for a 10-story brick hotel, 120 × 99 ft., at 77th St. and Broadway, to cost $600,000. Stein, Cohen & Roth, Archs., 92 Fifth Ave.

NEW YORK, N. Y.—Bids are asked by the Department of Education, Park Ave. and 59th St., until Dec. 2 for installing heating and ventilating apparatus and electric lighting plant in Balzer Hall, Borough of Brooklyn, and for alterations and repairs in school No. 177, Borough of Brooklyn.——Bids are wanted by the Fire Department, 157 East 67th St., until Dec. 4 for building new repair shops at 12th Ave. and 56th St.——The Studebaker Bros. Wagon Mfg. Co., South Bend, Ind., have concluded negotiations for the leasing of the Central Market property, Broadway and 48th St., for 21 years, and will erect an 8-story fireproof building on the plot, to cost between $300,000 and $500,000, to be used for a salesroom and store place by lessees.——The Puritan Realty Co. has purchased a plot 72 × 100 ft., at 59-63 West 44th St., for the purpose of erecting a hotel and restaurant, an investment of $600,000. The building will be 12 stories high and will resemble the Touraine, in 39th St. The Thompson-Starrett Co. has the contract.——The property at 26 East 20th St., and adjoining property in the rear, on 19th St., has been sold

through A. L. Mordecai & Son, and a 9-story apartment house will be erected on the site, to cost about $350,000. ——The City Teachers Association has decided to erect and equip a club house, to cost $300,000.——Corse Payton has purchased a site for a theatre in Harlem. The property is at Lexington Ave. and 123d St.—The trustees of the Norwegian Hospital have decided to erect a new structure at Fourth Ave. and 46th St., Brooklyn, to cost $100,000. It will be 5 stories high.——The contract for a new 48-classroom school at McKibben and Leonard Sts., has been let to Christopher J. Kenney at $172,360.——The following bids have been opened for work below the 36-ft. 6-in. level on the new custom house: Limestone—P. J. Carlin & Co., Brooklyn, $492,395; D. H. Hayes, Chicago, $523,314; W. A. & A. E. Wells, Chicago, $529,500; John C. Rodgers, New York, $577,000. Granite—John C. Rodgers, $456,000 to $480,000, according to kind; John Griffith & Son, Chicago, $493,510; John Pierce, New York, $495,640; P. J. Carlin & Co., $497,720 to $520,976, according to kind; Norcross Bros., New York, $532,500; D. H. Hayes, Chicago, $535,000 to $563,000, according to kind; Isaac A. Hopper & Son, New York, $948,700. Marble—Norcross Bros., $567,800.

TROY, N. Y.—Bids are asked until Dec. 9 for the construction, structural steel and plumbing for a new drill hall and alterations to the State Armory building at Troy. Chas. F. Roe, Major-General, Albany; G. L. Heins, State Arch., Albany.

UTICA, N. Y.—We are informed that A. C. Jackson, Arch., and Carrere & Hastings, Archs., 28 East 41st St., New York, are associated in the preparing of plans for the new public library. It will be two stories, 88 × 130 ft., and cost about $160,000. The working plans and specifications are not yet completed. The building will be of brick and stone and fireproof construction.

LAKEWOOD, N. J.—The plans for the new academy to be erected for the Sisters of Mercy at Lakewood have been completed by Henry Dagit, Arch. The building will be 3½ stories, of stone and brick, and 55 × 100 ft. Bishop McFaul, of Trenton, N. J., will have charge of all details in the matter.

PASSAIC, N. J.—Peter Reid, of the Reid & Barry Mills, has given $50,000 to this city for a public library. The building will be located in the Dundee section.

PRINCETON, N. J.—Plans for the new $250,000 gymnasium to be erected on the south campus of the University, have been completed, and work will soon be started. There will be two floors, the main floor being 101 × 168 ft.

McKEESPORT, PA.—Seward B. Hays, Homestead, will erect a 3-story brick office building at 8th Ave. and McClure St., to cost $50,000. The Homestead Trust Co., Homestead, will also erect a 3-story brick and stone building at 8th and Ann Sts., to cost $30,000.

PHILADELPHIA, PA.—Meyer Guggenheimer, of New York, has signified his willingness to give $60,000 to the Jewish Hospital Association for the erection of a new building.——It is understood that John W. De Long contemplates erecting a new apartment house in Germantown, on West Chelten Ave. It will be six stories, 100 × 150 ft., of stone, steel and fireproof construction.——Anthony J. Drexel is soon to build a $250,000 residence on the property recently acquired at Villanova. The plans are being prepared by Horace Strumbauer, Arch. The building will be of Indiana limestone, 160 × 100 ft.——The Pennsylvania R. R. Co. has decided to erect a new station at 52d St. and is now calling for bids, according to reports. W. H. Brown, Ch. Engr.——The contract for the interior rebuilding of the Merchants' Exchange at Third and Walnut Sts., for the use of the Stock Exchange, has been let to W. A. & A. E. Wells, at $160,685. The building is to be ready for occupancy within 10 months.——It is said that the Geo. A. Fuller Co. has plans for approximate estimates on a 22-story office building, to be an addition to the Land Title & Trust Co.'s building on the Lafayette Hotel site. The plans were prepared by D. H. Burnham & Co., Archs.

PITTSBURG, PA.—The contract for the stone church to be erected by the St. Andrew's Lutheran Church congregation at Center and Moorewood Aves., East End, have been let. The building will be 100 × 90 ft., and cost $40,000. C. M. Robinson, Arch., 314 Fourth Ave.——Two stories are to be added to the Smith building, at 6th St. and Liberty Ave., at a cost of about $30,000. The plans are being prepared by James T. Steen, Arch.——The United Real Estate Construction Co. has secured a permit for a 4-story building in Elsmore Ave., to cost $30,000.——The Grace Reformed Church has a permit for a new store edifice at Bayard and Dithridge Sts., to cost $80,000.

PITTSTON, PA.—The Y. M. C. A. will erect a $50,000 building here. Plans have been received.

SEWICKLEY, PA.—The Sewickley Valley Trust Co. is preparing to erect a new bank building at Beaver and 5th Sts., Sewickley. Work on the structure will begin April 1. It will cost $40,000.

WASHINGTON, PA.—It is stated that Rutan & Russell, Archs., Washington, are ready for bids for a $50,000 library building, at this place.

WEST HOMESTEAD, PA.—The school board of this place has decided to erect a 10-room building to replace the one destroyed, at a cost of $40,000.

BALTIMORE, MD.—Bids are asked until Dec. 4 for the erection of a factory building for the Maryland Penitentiary. H. S. Magruder, Arch., 710 Maryland Trust Bldg. ——It is reported that $30,000 has been subscribed toward the cost of building a 4-story annex building to the Union Protestant Infirmary, to cost about $40,000. Mrs. Wm. H. Rutherford, Pres. Bd. Mgrs.

BALTIMORE, MD.—Building Inspector Preston will have plans executed for five new schools, to be located as follows: Walbrook Ave. and Smallwood St., Chestnut and Fourth Aves., one in Waverly, one in East Baltimore and one in South Baltimore. Two of the five will cost $60,000 each, and each of the remaining three about $35,000 each. The plans will be completed by the early part of next month.

WASHINGTON, D. C.—Julius Wenig, Arch., has prepared plans for a 4-story apartment building, 35 × 80 ft., to be erected at First St. and New York Ave.——The contract for the new steam heating system in the workshop and boiler house for ordnance, League Island Navy Yard, Philadelphia, Pa., has been let by the bureau of yards and docks, to Harris & Algor, Camden, N. J., at $5,619.

BRISTOL, VA.—Local papers state that Mr. Hayter is trying to organize a company to erect a new theatre in this city, to cost in the neighborhood of $75,000.

RICHMOND, VA.—The Bell Telephone Co. has purchased property on Grace St., and will begin work at once on the erection of a building costing about $30,000. Plans have not yet been announced.

PARKERSBURG, W. VA.—Samuel Hannaford Sons, Archs., Cincinnati, O., inform us that the contract for all the work of erecting the office and hotel building for the Bank Block Investment Co. has been let to Wm. H. Ellis & Co., Cincinnati. The building will be seven stories, 109 × 107 ft., and will cost about $150,000.

ATLANTA, GA.—Hunter McDonald, Ch. Engr., Nashville, Chattanooga & St. Louis Ry., headquarters at Nashville, Tenn., is preparing plans for the repair work on the union depot in this city, to cost about $25,000.

REIDSVILLE, GA.—The bids received by County Ordinary Alexander on Nov. 11 were too high and will be rejected. The lowest was $34,500. Bids will be readvertised to be opened Jan. 15.

MOBILE, ALA.—Bids are asked until Dec. 26 for building a brick storehouse at Fort Morgan, Ala., as stated in our advertising columns. Capt. Spencer Cosby, U. S. Engr.

JACKSONVILLE, FLA.—The following bids were received by the capitol improvement commissioners on Nov. 14 for the improvements to the capitol building: J. E. Parish, Lynchburg, Va., $65,793 (accepted); Unkefer & Co., Columbia, S. C.; $68,400; Kendrick & Lew'ck, Tampa, $72,000; Nicholas Ittner, Atlanta, $70,972; H. W. Otis, Jacksonville, $69,888; Gilmore & Davis, Tallahassee, $67,777; S. S. Leonard, Savannah, Ga., $67,000 and $63,500.

JACKSONVILLE, FLA.—The plans of H. J. Klutho, Arch., for the proposed municipal building have been accepted by the board of public works. The building will be two stories in height, surmounted by a dome.

MOBILE, ALA.—Plans have been prepared by Stone Bros., Archs., New Orleans, La., for the new building, which L. Hammel & Co. will erect adjoining the Hotel Royal, on Royal St. It will be 5 stories, 75 × 164 ft., equipped with passenger and freight elevators.

JENNINGS, LA.—W. L. Stevens, Arch., Crowley, is preparing plans for a new brick building, 100 × 130 ft., for A. D. McFarland and others at Broadway and Railroad Ave., to cost $40,000.

NEW ORLEANS, LA.—The following bids were received by Hugh McCloskey, Pres. Bd. Comrs., on Nov. 19 for erecting a steel shed 60 × 500 ft., as advertised in Engineering News; bids are per 100 ft. of shed: Stewart Iron Works, Cincinnati, O., $2,980; L. Schreiber & Sons Co., Cincinnati, O., $2,450; Penn Bridge Co., Beaver Falls, Pa., $2,469; American Bridge Co. of New York, Henen Bldg., New Orleans, $1,741 and $1,668.

CLEVELAND, O.—Searles & Hirsch, Archs., have prepared plans for a $55,000 apartment house at 600 Prospect St., to be four stories, 50 × 120 ft.

SPRINGFIELD, O.—The contract for building the new administration building for the Knights of Pythias in this city, has been awarded to the John Hooser Co., Dayton, at $58,142.

YOUNGSTOWN, O.—Plans are being prepared by Owsley & Boocherle, Archs., for a 5-sty brick and stone fireproof building for U. A. Andrews on the hotel site. Work will begin in the spring.

DETROIT, MICH.—C. F. Sparrell, Arch., Benton Harbor, has plans for a 5-story brick building for the Order of Patricians, to cost about $40,000.——Plans have been prepared by Alpheus W. Chittenden, Arch., 34 Congress St., W., for the new club house for the Detroit Boat Club at Belle Isle. The building will be fireproof and cost $50,000.

DETROIT, MICH.—Malcomson & Higginbotham, Archs., will prepare plans for remodeling the city hall.

ALTON, ILL.—The school board is considering propositions for the sale of $50,000 in high school bonds.

CARBONDALE, ILL.—Bids are asked until Dec. 20 for building a brick and stone church. Edward S. Patten, Secy. Bldg. Com., Carbondale.

CHICAGO, ILL.—Plans have been prepared by S. S. Beman, Arch., Pullman Bldg., for a residence for Nelson Morris, on Michigan Ave., at 36th St., to cost $75,000. It will be 3 stories, 50 × 80 ft.——Ogden, Sheldon & Co. will erect a 6-story building at 434-8 Illinois St., for the occupancy of the General Electric Co. The building will be 171 × 65 ft., of brick and terra cotta, costing $75,000.——The Industrial Art League of Chicago will establish a free workshop, and will raise $100,000 for that purpose.——A 7-story commercial building is to be erected on Michigan Boulevard by Milton Palmer, for which plans have been completed by C. M. Palmer, Arch., 1207 Monadnock Block. It will be 40 × 150 ft., of stone and equipped with electric passenger and freight elevators and steam heat, and will cost about $40,000.——L. M. Mitchell, Arch., is completing plans for an apartment house for Frank P. Burkett at 4131-39 Indiana Ave., to be three stories, 50 × 68 ft., and costing about $48,000.——A permit has been secured by the Western Electric Co., for a 10-story brick factory at 277-81 Clinton st., to cost $172,000.——Mr. O'Keefe has secured a permit for five 3-story brick apartment houses at 5500-2 Cornell Ave., and 118 55th St., to cost $75,000.——Preliminary plans have been prepared by Holabird & Roche, Archs., 1618 Monadnock Block, for a mercantile building at Monroe St. and Wabash Ave., to cost $1,000,000. It will be ten stories, 76 × 172 ft., of steel construction. Among those interested in the project are Bryan Lathrop and Arthur T. Aldis, Chicago, and R. M. Bradley and A. Lyman, Boston, Mass.

SPRINGFIELD, ILL.—The plans for the new state arsenal at this place have been completed by S. A. Bullard, Arch., 208 South 6th St., and call for a building three stories high.

LANCASTER, WIS.—The county board of Grant county has voted to build a new court house to cost $80,000.

ORANGE CITY, IA.—The Sioux county board of supervisors has decided to call an election for Dec. 18 to vote on the question of issuing bonds for the building of the proposed new court house, which will cost $60,000.

MANKATO, MINN.—Bids are asked until Dec. 17 for constructing a library building at Mankato. John C. Thro, Pres. Library Bd.; Jardine, Kent & Jardine, Archs.

MINNEAPOLIS, MINN.—Congressman Loren Fletcher will ask for an appropriation of $250,000 for building an additional story on the federal building in Minneapolis.

ST. PAUL, MINN.—Bids are asked until Dec. 3 for the fireproofing for the new state capitol building at St. Paul. Channing Seabury, Bd. State Capitol Comrs.

TOPEKA, KAN.—The donor of the $50,000 to the Washburn College for the new astronomical observatory has requested that the trustees of the college proceed with the work with all dispatch.

OMAHA, NEB.—Dr. S. D. Mercer and George Mercer are promoting a plan to build a market house. The enterprise would represent a cost of about $400,000.

ST. LOUIS, MO.—Chas. K. Ramsey, Arch., 604 Wainwright Bldg., under date of Nov. 23, wrote us that bids would be received Nov. 27 for building a 3-story apartment 100 × 90 ft., costing about $60,000. The building will be erected for the Northumberland Real Estate Co., and will be supplied with hot water heating and electric and gas lighting. The plans were then in the hands of contractors.——A company composed exclusively of T. P. A. men has been organized and will incorporate for the purpose of building a hotel at the World's Fair in 1903. The hotel, as planned, will have 2,000 rooms and will cost $200,000.——Donations and subscriptions for a church and parsonage construction have reached $40,000. W. F. McMurray, Elder, 16th and Pine Sts.

SPOKANE, WASH.—Gen. H. C. Merriam, U. S. A., retired, it is said, will erect a building on his property at First Ave. and Howard St. in the spring, to cost in the neighborhood of $100,000.

EUREKA, CAL.—H. A. Poland, Pres. Common Council, writes that an election will be held Dec. 16 to vote on the question of issuing bonds to the amount of $30,000 for building school houses.

LOS ANGELES, CAL.—John Brockman, of Arizona, has purchased property on Seventh and Grand Aves., and announces his intention of erecting a hotel to cost between $60,000 and $70,000.——The city superintendent of buildings has issued a permit to the Los Angeles Ry. Co. for the construction of four 1-story buildings at 7th St., between Alameda and Central Ave., to cost $50,000.

SAN FRANCISCO, CAL.—Press reports state that the Municipal Federation of Improvement Clubs has petioned the supervisors to call an election for the purpose of voting $5,000,000 worth of bonds for new school houses. ——James B. Lankershim is reported as stating that he will probably build a $200,000 hotel on Main St., extending from 4th to Winston, 215 × 150 ft. The building will be five stories, of red brick and red sandstone.

SAN FRANCISCO, CAL.—The supervisors have adopted the resolution to hold an election on Dec. 29 to vote on the proposition of issuing bonds for new school houses, intercepting sewer and city and county hospital.——The Blythe Estate buildings on Market, Geary and Grant Aves. will be torn down and new buildings erected, at a cost of $3,000,000.

SAN FRANCISCO, CAL.—Bids are asked until Dec. 4 for constructing an addition to the shed over Pier No. 3, Mission St. wharf, and Pier No. 3, Washington St. wharf. W. D. English, Secy.

TORONTO, ONT.—The Union Trust Co. has taken out a permit for the erection of an apartment house in University Ave., near Orde St., at a cost of about $100,000.

WATER-WORKS.

BANGOR, ME.—Frank L. Marston of this city, is making surveys in the northern part of the state near Norcross to ascertain what facilities there are in that section for storage of water.

FAIRHAVEN, MASS.—The Fairhaven Water Co. will rebuild its water tower that recently collapsed at once, according to reports. J. K. Nye, Supt.

WESTERLY, R. I.—The legislature has granted this city permission to issue $100,000 in bonds for extending the works.

ADAMS, N. Y.—A. R. Shannon, of Watertown, N. Y., is reported as making arrangements for completing the works for this place to cost about $10,000.

CARTHAGE, N. Y.—Brownell & Co. have reported to the commissioners that they will be unable to make the surveys for the proposed new works, and that other engineers will have to be engaged, according to reports.

NEW YORK, N. Y.—Bids are asked by the department of water supply, Park Row, until Dec. 21, for laying water mains in a number of streets in Manhattan and the Borough of the Bronx.

NIAGARA FALLS, N. Y.—The Depew & Lake Erie Water Co., of Depew, N. Y., has offered to buy the Niagara Falls municipal water-works for $225,000 and if this offer is accepted the company will lay 34 miles of 36-in. mains, thus supplying the entire Niagara Falls frontier with water. The cost of laying these mains is estimated at $3,000,000. The company proposes to sell to the Tonawandas, Gratwick, La Salle and Grand Island. Wm. B. Cutter, Pres., Buffalo, N. Y.

CALDWELL, N. J.—John Espy, Mayor, writes us that the council will engage an engineer to prepare plans for works, after which bids for the construction will be asked. Pop., 1,800.

FLORENCE, N. J.—The Florence Water Co. has been incorporated with a capital of $50,000 by Wm. C. Jones and Heber C. Robinson, of Camden, N. J., and Ernest Watts, of Burlington, N. J.

SOUTH ORANGE, N. J.—The trustees have made a new 10-year contract with the Commonwealth Water Co. for furnishing this place with water.

BOWERS, PA.—The Flint Hill Water Co., it is stated, will build a new reservoir about a quarter of a mile from town.

DANIELSVILLE, PA.—The Danielsville Water Co. has been incorporated with a capital of $10,000.

DELANO, PA.—The Delano Water Co. has been incorporated with a capital of $10,000 by Jas. F. Schaperkotter, of Philadelphia; Thos. W. Huline, of Mount Holly, N. J., and Wm. Arderson, of Overbrook, Pa.

DUNCANSVILLE, PA.—L. S. Price, Ch. Burgess, writes us that a vote will soon be taken on the question of works, and if the result is in favor of the improvement bids will be asked at once. The water will be secured from the Allegheny Mountains, four miles distant. Information regarding the construction of works is wanted at once. Pop., 1,800.

MONESSEN, PA.—The Dravo Contracting Co., of Pittsburg, Pa., is reported to have been awarded the contract by the Pittsburg Steel Co. for building water-works to cost $35,000. The works will include a pumping plant, 30 × 100 ft., and will have a capacity of 25,000,000 gallons a day.

PITTSBURG, PA.—Keeling & Ridge, of Pittsburg, Pa., it is stated, will complete the new Highland reservoir in the spring.

YARDLEY, PA.—The Yardley Borough Water & Power Co. has been incorporated with a capital of $10,000 by Chas. T. Eastburn and E. E. Insinger.

DELMAR, DEL.—The question of building works is again being considered.

BALTIMORE, MD.—The water board is considering sites for a new high-service reservoir to cost about $400,000. It is proposed to heighten the dams at Loch Raven from 5 to 10 ft. Address Water Engineer Quick and W. W. Varney, of the Water Board.

FORT WASHINGTON, MD.—Bids are asked until Dec. 9 for constructing a permanent pumping station, 140,000-gallon reservoir, 60,000-gallon steel tank, etc., as stated in our advertising columns. Capt. A. S. Bickham, Q. M., U. S. A., Alexandria, Va.

WASHINGTON, D. C.—We are informed that General Gillespie, Chief of Engineers, has asked for $1,000,000 for continuing work on the slow sand filtration works at Washington out of $1,786,123 estimated as required to complete the project. The average water consumption per 24 hours during the year was 49,075,940 gallons or 193 gallons per capita. The cost of filtration is estimated at $6 per million gallons per day, or $110,000 annually. The

annual budget of the district commissioners for the fiscal year 1903 amounts to $10,439,382. Among the most important items are the following: New sewers, $280,000; pumping station for sewage disposal, $375,000; collection and disposal of garbage and ashes, $142,679; six new engine houses, $117,000; three engines, $15,000; three chemical engines and hose wagons, $5,000; 2 chemical engines, $5,000; 2 trucks, $7,000; higher pressure water service in business district, $500,000; eleven new school houses, $456,000; street sweeping, $205,000; repairing city streets, $200,000; repairing county roads, $100,000; paving city streets, $253,000; constructing and paving country roads and suburban streets, $150,000.

LYNCHBURG, VA.—W. C. N. Randolph, Jr., Supt. Water-Works, writes us that the contract for two 100-HP. boilers for the water-works will be let in two weeks. Other improvements will hardly be made until after the annual appropriation is voted in February.

ELIZABETH CITY, N. C.—T. B. Wilson, Mayor, writes us that the water committee is composed of M. N. Sawyer, Chn., Fred Davis and A. L. Pendleton.

LOUISBURG, N. C.—The commissioners are prepared to consider plans and estimates for building works and a sewerage system to cost $30,000, recently voted. E. S. Green, Town Secy.

WAYNESBORO, GA.—The governor has signed the bill authorizing this place to issue bonds for works and an electric plant.

JACKSONVILLE, FLA.—Townsend, Scott & Son and Wilson, Colston & Co., both of Baltimore, Md., have purchased $400,000 of water-works and public improvement bonds at 7.535% above par. D. U. Fletcher, Mayor.

KISSIMMEE, FLA.—The question of works to cost about $15,000 is being considered.

BILOXI, MISS.—An election will be held Dec. 23 to vote on the question of issuing $40,000 in bonds for city works and electric plant, either by purchase or the construction of new plants.

HATTIESBURG, MISS.—Bids are asked until Dec. 12 for constructing works. T. W. Nicol, Engr., Pollock Bldg., Mobile, Ala.; C. W. Rich, Mayor; A. Fairley, Clk.

HAZLEHURST, MISS.—Coleman & Malochee, of New Orleans, La., have been engaged to prepare plans for works and an electric plant to cost $35,000.

LEXINGTON, MISS.—Money & Money, of Carrollton, Miss., write us that they will build the proposed works and will not ask for bids. There will be one 10,000-gallon tank, 2-in. pipe, etc., which will cost $3,500, but which later will be doubled. The water will be secured from artesian wells. Pop., 1,200.

YAZOO, MISS.—The Yazoo Improvement Co., owner of the works and electric plant, will increase its capital from $100,000 to $150,000 for extensions, in addition to $75,000 of bonds. Geo. P. Smith, Pres.; W. H. St. John, Secy.; R. L. Bennett, Treas.

ABBEVILLE, LA.—Bids are asked by the Abbeville Canal Co. for grading five miles of irrigation canal, containing about 90,000 cu. yds. of earth worth, as stated in our advertising columns. F. L. Foote, Engr.

LAKE PROVIDENCE, LA.—This place is reported to have voted $20,000 of 5% bonds for city works and an electric plant.

NEW ORLEANS, LA.—Bids are asked until Jan. 22 for furnishing the materials and for installing a pump, electric plant, etc., for the drainage system, as described in our advertising columns. R. M. Walmsley, Pres. Drainage Com.

VINTON LA.—We are informed that the Sabine Canal Co., which is about ready to commence construction, has just completed the preliminary survey of about 25 miles, and has determined on a certain line or lines. Work was commenced on securing rights of way last week. The contracts for grading, clearing, grubbing, flumes, etc., have been let to S. A. Robertson, of Orange, Tex. The contracts for pumps, engines, boilers, etc., were not let Nov. 22. The plant will water 40,000 acres of land. The canal will be 150 ft. wide and 20 miles long, with 60 miles of laterals Pumps of 400,000 gallons a minute will be installed. D. M. Duller, Asst. Engr., Vinton.

DICKSON, TENN.—Bids are asked by G. A. Dayden, Mayor, until Dec. 2 for the purchase of $35,000 of 5% 30-year bonds for works and an electric plant.

NEWPORT, KY.—The Union Heat, Light & Power Co. has offered to purchase the works at Southgate with a view to extending the same.

BROOKVILLE, O.—The question of works to cost about $24,000 will probably soon be voted upon. Address J. E. Barnes and B. F. Hoe.

CINCINNATI, O.—Bids are asked by the Board of Trustees, Commissioners of Water-Works, until Dec. 24 for completing the tunnel and shafts for supplying water to the Western Pumping Station, as described in our advertising columns.

HAMILTON, O.—Local papers state that the quality of the water supply is very poor and that the board of city affairs should take steps at once to improve it.

NEWARK, O.—L. E. Chapin, of Canton, O., has been engaged to prepare plans for city works. The contract with the Newark Water-Works Co. expires in 1904.

SANDUSKY, O.—J. D. Cook, of Toledo, O., has been engaged to report upon the condition of the water-works.

SEBRING, O.—It is stated that this place has decided to proceed at once with the construction of works to cost $50,000.

WESTERVILLE, O.—Reports state that plans for the proposed works, sewers and paving have been completed. The committee consists of Councilmen Selly, Frank Miller and Jess Miller.

BRAZIL, IND.—The question of erecting a standpipe to be about 150 ft. high is being considered. Address Superintendent Evans.

HOMER, MICH.—The question of issuing bonds for works is being considered.

LAURIUM, MICH.—Reports state that this place proposes to build its own works.

PONTIAC, MICH.—Fisher Bros. have completed plans for a 50 × 75 ft. addition to the pumping station.

ARTHUR, ILL.—Bids are asked until Dec. 7 for furnishing the material and for constructing works, to include wells, etc. E. M. Fleming, Village Clk.

CHICAGO HEIGHTS, ILL.—The committee, S. A. Hawkins, Chn., has recommended the purchase of a vertical compound pumping engine of 5,000,000 gallons capacity.

GLENELLYN, ILL.—This place has voted against issuing bonds for works.

LA GRANGE, ILL.—This city will hold an election Dec. 10 to vote on the question of leasing the works for 20 years and then purchasing the same for $260,000. F. D. Cossitt, Pres. of Village.

McLEAN, ILL.—The question of works is reported as being considered.

MONMOUTH, ILL.—For the new water supply a pump well has been sunk 158 ft., the pumps being at the bottom, and the steam cylinders above ground. The total lift from the pumps to the standpipe is about 300 ft. The supply will be 1,000,000 gallons per day. D. W. Mead, Engr., First National Bank Building, Chicago, Ill.

OREGON, ILL.—The question of extending the water mains and the electric plant is being considered.

ROCKFORD, ILL.—Superintendent Calkins is urging the installation of water meters throughout the town.

RIVERDALE, ILL.—Bids are asked until Dec. 10 for furnishing the materials and for constructing works, as described in our advertising columns. Sturtevant & Todd, Engrs., 1208 Fisher Bldg., Chicago; A. C. Reich, Pres.

SHAWNEETOWN, ILL.—The question of installing works in connection with the electric plant is being considered by A. M. Searles, of Chicago, the owner.

VIRGINIA, ILL.—The question of works will be voted upon at the coming election, according to reports.

WHEATON, ILL.—Owing to the present pumping plant having nearly reached the limit of the supply when pumping 220 gallons a minute, and the water level having been lowered to 25 ft. below the pump, the Mayor, J. S. Peironnet, has recommended that the city purchase an air compressor and adopt the air-lift system. A considerable extension of the water mains is also in prospect. Lewis Ellsworth, Cy. Clk.

WOODHULL, ILL.—An election will soon be held to vote on the question of issuing $15,000 in bonds for works, the water supply to be secured from wells.

SUPERIOR, WIS.—The Superior Water, Light & Power Co. proposes to extend its plants at a cost of about $35,000.

CLARINDA, IA.—The Chicago Bridge & Iron Co., of Chicago, Ill., has been awarded the contract at $3,871 for a standpipe 20 × 60 ft., to have a capacity of 130,000 gallons.

BIRD ISLAND, MINN.—An election was held Nov. 20 to vote on the question of issuing bonds for works to cost $8,000. Frank Murray, Recdr.

HARMONY, MINN.—An election will soon be held to vote on the question of issuing bonds for works, according to reports.

ST. PAUL, MINN.—Bids are asked by the county commissioners until Dec. 2 for sinking a test well for the proposed water supply at White Bear Lake.

ST. PAUL, MINN.—Local papers state that the water board has estimated the damage to the water mains by the electric railway wires at about $500,000. Efforts will be made to improve these conditions.

HUTCHINSON, KAN.—The city proposes to purchase the works of the Hutchinson Water, Light & Power Co.

YATES CENTER, KAN.—The council is reported as considering propositions to furnish this place with a water supply.

RANDOLPH, NEB.—A. C. Koenig, of Grand Island, Neb., writes us that the following contracts were let Nov. 1 for works: Stillwell-Bierce & Smith-Vaile Co., Chicago, Ill., 5½ × 8 double-action triplex pump, with counter-shaft, rope-drive and all materials for suction and discharge, etc., connections for installing in well 81 ft. deep, $928; Olds Gasoline Engine Works, Omaha, 25 acting HP. gasoline engine and installing pump and engine complete, $1,118; Beckenhauer & Mitchell, Randolph, brick pumping station, enlarging bottom of well for pump chamber and lining entire well with brick, $2,400. To obtain the best results in this special installation, bidders were accorded considerable liberty in the selection of the proportion of the work, included in each bid.

SIOUX FALLS, S. DAK.—The South Dakota Water Co. has been asked to set a price at which it will sell its works to the city, and to report Dec. 2. At a recent election this place voted to issue $210,000 in bonds for new works or for the purchase of the present plant. E. G. Ledyard, Cy. Audr. Address J. W. Tuthill and W. T. Doolittle and Mayor Burnside.

MISSOULA, MONT.—The Grass Valley French Ditch Co. has been incorporated with a capital of $30,000 to build an irrigation canal between Missoula and Grass Valley by John Cyr and Gaspard Deschamps.

KANSAS CITY, MO.—Bids are asked until Dec. 2 for furnishing three boilers, mechanical stokers, etc., for the water-works, as described in our advertising columns. H. B. Walker, Secy. Bd. Pub. Wks.——The question of building a concrete and steel aqueduct, 5 ft. in diameter, from Quindaro to Turkey Creek, for the water supply is being considered.

MARSHALL, MO.—An election will be held Dec. 10 to vote on the question of issuing bonds for works and an electric plant.

GREAT BEND, ARK.—Jos. H. Harris, of Kansas City, Mo., is reported as interested in a scheme to build an irrigation system a few miles from Great Bend to irrigate about 600,000 acres.

AUSTIN, TEX.—The water and light commissioners have decided to rebuild the dam, partly destroyed two years ago, at a cost of about $500,000.

CLARKSVILLE, TEX.—Robt. Sivley is reported to have asked for a franchise for works.

FLORESVILLE, TEX.—A. G. Pickett has offered to build works for this place to cost about $15,000, the water to be secured from the San Antonio River.

HOUSTON, TEX.—The Sexton Rice & Irrigation Co. has been incorporated with a capital of $100,000 by T. W. Ford, T. H. Stone and Manly Sexton.

WILBUR, WASH.—An election will be held Dec. 17 to vote on issuing $11,950 in bonds for works.

WESTON, ORE.—Edwin Fish, a banker of Portland, Ore., has submitted a proposition to lease the works and electric plant. Mr. Fish, it is stated, will make improvements to the plants.

CAMPBELL, CAL.—The matter of buying a small water plant and fire-fighting apparatus is being considered. E. C. Hurlbert and Benj. Campbell may be addressed

LOS ANGELES, CAL.—The Edgemont Water Co. has been incorporated with a capital of $500,000 by H. F. Bridges and S. W. Hudson.

SAN JOSE, CAL.—Bids are asked until Dec. 26 for sinking an artesian well at the Agnew State Hospital to a depth of 1,000 ft. T. S. Montgomery, Secy., 7 West Santa Clara St.

STOCKTON, CAL.—The Stanislaus & San Joaquin Water Co. has decided to build two new irrigation ditches, one to be eight miles and the other six miles long.

CALDWELL, IDAHO.—H. Sebree, Mayor, writes us that it is proposed to put in works to cost about $20,000 as soon as the materials are purchased.

MONCTON, N. B., CAN.—The council has selected a source for a new water supply.

WESTMOUNT, QUE.—The question of filtering the water supply is reported as being considered. Address Mayor Lighthall.

CALGARY, ALTA TER., CAN.—Geo. A. Anderson, of Denver, Colo., is reported to have made surveys and estimates for irrigation systems for the Canadian Pacific Ry. Co., to be located between Medicine Hat and Calgary, near this place. The company will build at first a system to reclaim about 300,000 acres of land. If this proves successful a system will be built to irrigate about 2,000,000 acres.

SEWERAGE.

SOUTH PORTLAND, ME.—Sewer bonds to the amount of $10,000 are being sold by the city.

NEW BEDFORD, MASS.—William F. Williams, City Engr., has presented three plans to the council committee for the relief of the Clark's Grove sewer, at an estimated cost of from $120,000 to $163,154, according to system used. A motion was passed recommending that $1,200 be appropriated for continuing the investigation.

HARTFORD, CONN.—City Engineer Bunce has estimated the cost of making a rock and dirt cut sewer trench from Franklin Ave. to the Folly Brook sewer at $18,800, and the street commissioners have decided to ask the council to appropriate $20,000 for the work.

BRONXVILLE, N. Y.—The cost of constructing a sewerage system with filter beds, pumps, etc., has been estimated at $40,000, and the plans have been forwarded to the state board of health for approval. Frank Dissmore, Village Clk.

CORINTH, N. Y.—S. J. Mott, Civil Engr., Saratoga, is making a survey of the village for the sewerage system which is soon to be installed here.

DUNKIRK, N. Y.—The council has adopted a resolution of intention to construct a 10-in. pipe sewer in two streets. J. P. Groesch, Cy. Clk.

OSWEGO FALLS, N. Y.—It is reported that the sewer commission, composed of Dr. B. A. Loveless, E. J. Hogan and John Boland, will take measures to have a preliminary survey made for a complete sewerage system.

SAG HARBOR, N. Y.—Cornelius R. Sleight, Clk., writes us that the proposition to install a sewerage system was defeated on Nov. 20.

BRIDGETON, N. J.—Reports state that a syndicate intends to ask for a franchise for a sewerage system and a gas plant in this city and in Millville.

ELIZABETH, N. J.—The committee on sewers has recommended that the following contracts be awarded: Arnold & Tenor, sewer in Flora St., $2,185; Henry T. Clark, sewer in Olive St., $1,340, in Emma St., $942.

JERSEY CITY, N. J.—Bids are asked until Dec. 3 for constructing sewers, as follows: about 2,430 lin. ft. of 36-in. c.-i. sewer, 400 lin. ft. of 24-in. c.-i. sewer, 810 lin. ft. of 30-in. brick oval or circular sewer, 482 lin. ft. of 24-in. brick oval or circular sewer, 950 lin. ft. of 18-in. vitrified pipe sewer, 4,000 cu. yds. of rock excavation, 50 cu. yds. of concrete, 100 cu. yds. of brick masonry, 27,000 lin. ft. of piles driven, 40,000 ft. B. M. of capping, 10,000 ft. B. M. of flooring, 1,400 ft. B. M. of chocks, 11 receiving basins, 3 special steel connections, 18 ⅛-bends, 36-in. diameter, 6 automatic air valves, including brick manholes and covers, Tuttle design, 20,000 ft. B. M. sheathing. Geo. T. Bouton, Clk. St. and Water Comrs.

MOORESTOWN, N. J.—The following bids were received on Nov. 14 for completing the sewerage system and disposal plant, as advertised in Eng. News: Harrison Construction Co., Newark, $44,091; John H. Hurley, Trenton, $44,471; E. C. Worrell, Moorestown, $56,479; David Peoples, Philadelphia, Pa., $42,011 (awarded contract).

TRENTON, N. J.—Bids are asked until Dec. 3 for constructing a sewer with house connections in three streets. C. Edward Murray, Cy. Clk.

WEST NEW YORK, N. J.—The Metropolitan Construction Co. was the lowest of six bidders for constructing a sewer in Niles Ave., $7,400.

CANONSBURG, PA.—It was voted on Nov. 12 to issue $40,000 in bonds for constructing a sewerage system.

ERIE, PA.—The city engineer has been directed to make a survey and report on the estimated cost of an intercepting sewer to dispose of all sewage now emptying into Presque Isle Bay and Mill Creek.

PITTSBURG, PA.—Contracts amounting to about $150,000 have been awarded as follows: Cronin & Herron, sewer in Apple St.; J. B. Sheets & Co., sewers in three streets; North Side Coal & Sand Co., sewer in Herr St.; Lee & Casey, sewer in Penn Ave.; Thomas Prosser, sewers in two streets; Conea Ascella, sewer in Wightman St.; Ott Bros., sewer in Lincoln Ave.

WASHINGTON, PA.—An election will be held on Dec. 28 to vote on the question of issuing $70,000 in bonds for extending the sewerage system and erecting a disposal plant.

WASHINGTON, D. C.—Bids are asked until Dec. 16 for constructing a dormitory, sewer and water system at Pryor Creek, Crow Agency, Mont.; also for furnishing 2,100 ft. of 6-in. c.-i. pipe, 33 lbs. to the foot; two 45-degree bends, 8 lbs. of pig lead for each joint; 6,740 ft. of 6-in. spiral riveted pipe, asphalted, No. 20 B. W. G., 3 lbs. to the foot, thickness .035, and Roots bolted joints. W. A. Jones, Comr. of Indian Affairs.

LOUISBURG, N. C.—It has been voted to issue $30,000 in bonds for sewerage and water-works, and the commissioners will consider plans and estimates for constructing these systems. E. S. Green, Town Secy.

JENNINGS, LA.—The question of a sewerage system and water-works is again being considered. The water-works proposition was defeated at a special election about a year ago.

NASHVILLE, TENN.—F. E. Kuhn, Secy. Bd. Pub. Wks., writes us that $100,000 has been appropriated and will be expended next year for constructing large brick sewers.

LEXINGTON, KY.—Mayor H. I. Duncan writes us that plans for the sewerage system and disposal plant were prepared by the late Geo. E. Waring and that the council will make further appropriations in January for the gradual construction of the system.

NEWPORT, KY.—W. L. Glazier, Supt. Pub. Wks., writes us that contracts for cement and pipe sewers in Dist. A, aggregating $34,000, have been let to the following: Van Sandt & Meids, Cincinnati, O.; Thos. Strack, Cincinnati, O.; Jas. S. McLane, Newport; Jno. B. McLane, Newport.

CLEVELAND, O.—Plans have been prepared and it is proposed to construct a sewer in Merchant Ave. Walter B. Gongwer, Secy. Bd. of Control.

GALION, O.—Gleya Mather, Mayor, writes us that the question of issuing bonds for a sewerage system was defeated on Nov. 5 and that a special election may be called to vote on the matter again.

HAMILTON, O.—Bids are asked until Nov. 28 for constructing sewers and appurtenances in four streets. M. O. Burns, Cy. Clk.

FT. WAYNE, IND.—Bids are asked until Dec. 5 for constructing a main sewer in an alley and local sewers in several alleys. Peter Eggemann, Chn. Bd. Pub. Wks.

GOSHEN, IND.—Bids are asked until Dec. 2 for constructing about 5,813 ft. of sewers at a cost of about $3,662. Geo. A. Beck, Cy. Clk.; John L. Cooper, Cy. Engr.

NEW CASTLE, IND.—Bids are asked until Dec. 10 for constructing a sewerage system approximately seven miles in length. George H. Maxim, Pres. Trustees. W. H. Adams, Town Clk.

GRAND RAPIDS, MICH.—Resolutions have been adopted by the council for constructing sewers in three streets at an estimated cost of $3,987. I. F. Lamoreaux, Cy. Clk.

HILLSDALE, MICH.—S. E. Johnson & Co., Lansing, have been awarded a contract for building a trunk sewer down the bed of the St. Joe River.

GALESBURG, ILL.—John B. McAuley, Cy. Engr., writes us that a committee has been instructed to investigate with reference to a complete sewerage system. Wm O'R. Bradley, Mayor.

WAUSAU, WIS.—Bids are asked until Dec. 2 for constructing a sewer in Washington St. John Patzer, Cy. Clk.

HUTCHINSON, MINN.—Loweth & Wolff, Civil Engrs., St. Paul, have been engaged to prepare plans and specifications for a sewerage system, and if the estimated cost is satisfactory bids will be asked at an early date.

ST. PAUL, MINN.—C. H. Bronson, Clk. Bd. Pub. Wks., writes us that all bids for constructing the Whitell St. sewer have been rejected and the clerk directed to advertise for new bids.

KANSAS CITY, MO.—Plans are being prepared for a sewer 7 ft. in diameter to drain a part of the east side.

ROSWELL, N. MEX.—Matt & Roberts, Independence, Mo., have been awarded a contract for constructing a sewerage system, as advertised in Eng. News, at $30,000. The quantities are as follows: 3,000 lin. ft. 12-in. pipe sewer, 2,640 lin. ft. 10-in. pipe sewer, 29,240 lin. ft. 8-in. pipe sewer, 3,000 lin. ft. 8-in. drainage pipe, 2,640 lin. ft. 6-in. drainage pipe, 29,240 lin. ft. 4-in. drainage pipe, 8 flush tanks with 6-in. siphon, 1 flush tank with 8-in. siphon, 91 manholes. Saml. Atkinson, Town Clk.

SEATTLE, WASH.—A. H. Dimock, Asst. Cy. Engr., writes us that bids will probably be opened on Dec. 14 for constructing three miles of sewers at an estimated cost of $36,000. R. H. Thompson, Cy. Engr.

ASHLAND ORE.—Reports state that the council will be urged to take up the question of installing a sewerage system at a cost of about $20,000.

LONG BEACH, CAL.—Steps will soon be taken to install a sewerage system, according to reports.

OAKLAND, CAL.—Resolutions have been adopted by the council for constructing 6-in. pipe sewers in eight streets. John C. Coburn, Clk.

PASADENA, CAL.—Bids are asked until Dec. 1 for constructing 3.12 miles of 8, 10 and 12-in. pipe sewers; estimated cost, $14,000. T. D. Allin, Cy. Engr.

POMONA, CAL.—Arza Crabb, Cy. Clk., writes us that bids are asked until Dec. 3 for constructing sewers in the south district. W. H. Seinders, Designing Engr.

SANTA CLARA, CAL.—Bids are asked until Dec. 2 for constructing a sewer in Fremont St. G. J. Fenton, Town Clerk.

GARBAGE DISPOSAL—STREET CLEANING

LOWELL, MASS.—Plans and specifications for a Smith garbage disposal plant are reported as completed.

NEWPORT NEWS, VA.—Bids are asked until Dec. 16 for building a garbage crematory. W. L. Wohl, Cy. Clk.; F. C. Lenz, Chn. Com.

CINCINNATI, O.—Bids are asked until Dec. 11 for collecting, removing and disposing of garbage, etc., for five years from June 1, 1902, and for dead animals, offal, etc., for three years and 11 months from July 3, 1903. Bond, $10,000. Edwin Henderson, Cy. Clk.

MILWAUKEE, WIS.—The aldermen propose to have the garbage, etc., collected by contract instead of by the city, which costs $75,000 a year, and it is likely that the board of public works will soon ask for bids.

SPOKANE, WASH.—The board of public works is considering sites for a garbage disposal plant. Frank Weymouth, Pres.

SALT LAKE CITY, UTAH.—The council, it is stated, will soon take action on the matter of building a crematory, to cost about $15,000.

STREETS AND ROADS.

BOSTON, MASS.—Bids are asked until Nov. 29 by the Massachusetts highway commission, 20 Pemberton Square, for building about 3,300 ft. of state highway in the town of Raynham.——Mayor Hart has signed ordinances providing for street improvements in the suburban districts aggregating $278,789.

BUFFALO, N. Y.—Bids are asked until Dec. 3 for paving with different materials in Bradley St.; also until Dec. 6 for paving in Bardol and Spiess Sts. with different materials. R. G. Parsons, Secy. Bd. Pub. Wks.

NEW YORK, N. Y.—Bids are asked until Dec. 6 for 24,450 sq. yds. of asphalt paving, 3,108 cu. yds. of concrete, curbing, etc., in the Borough of Brooklyn. Jas. P. Keating, Comr. of Highways, 13 Park Row

GLOUCESTER CITY, N. J.—City Clerk Lane has been directed to advertise for bids for macadamizing and laying water mains in five streets, to cost about $11,000.

HOBOKEN, N. J.—Bids are asked until Dec. 11 for grading, paving with Belgian blocks, etc., in Jackson and Grand Sts. John Haggerty, Cy. Clk.

PARK RIDGE, N. J.—It has been voted to macadamize two streets, at a cost of $3,000.

NORFOLK, VA.—Atlantic City Ward voted on Nov. 14 to issue $480,000 in bonds for asphalt paving and for water and sewers in the unimproved streets.

MOBILE, ALA.—J. M. Hazlehurst, Ch. Engr. Bd. Pub. Wks., informs us that the following bids were received on Nov. 14 for asphalt paving, curbing and storm sewers, as advertised in Eng. News: Southern Paving Co., Chattanooga, Tenn, $55,013; Louisiana Improvement Co., New Orleans, La., $51,350; Green River Asphalt Co., St. Louis, Mo., $48,201 (awarded contract).

SHREVEPORT, LA.—A resolution has been adopted by the council asking for bids for paving with asphalt in Sprague St.

CHATTANOOGA, TENN.—The board of public works is considering the question of paving West 9th St., at a cost of about $5,000.

WELLSVILLE, O.—The council has passed resolutions to borrow $48,500 for improving four streets.

CINCINNATI, O.—Bids are asked until Dec. 21 for improving Oak Ave. in Springfield Township. Eugene L. Lewis, County Audr.

JACKSON, O.—Bids are asked until Nov. 30 for constructing sidewalks in two streets. M. D. Jones, Cy. Clk.

ADRAIN, MICH.—J. H. Reynolds, Mayor, writes us that about 1½ miles of brick paving has been laid out and ordered for next year, contracts for which will be let during the winter.

DETROIT, MICH.—S. A. Ferguson, Cy. Engr., writes us that no further contracts for paving will be let until after April 25, 1902; also that a contract has been awarded for the proposed asphalt plant.

HOUGHTON, MICH.—The question of paving the streets is being agitated, according to reports.

BELVIDERE, ILL.—Bids were to have been opened by the board of local improvements on Nov. 27 for macadamizing, and contracts for more street work will be let during the winter.

CHICAGO, ILL.—Bernard F. Rogers, Pres. Bd. Local Improvements, writes us that an ordinance is pending in the council for 38,340 sq. yds. of asphalt paving in State St., at an estimated cost of $2.50 per sq. yd.; sundries, $9,650; total, $108,500. John B. Hittell, Ch. Engr. of Streets.

LA CROSSE, WIS.—The county supervisors have appropriated $8,000 for roads and bridges in several towns.

DUBUQUE, IA.—The question of paving around the court house with asphalt is being discussed.

MINNEAPOLIS, MINN.—City Engineer Patton is preparing estimates for paving the avenues from Second Ave. East to Sixth Ave. West, between Superior and Michigan Sts. The work will probably be done in the spring.

KANSAS CITY, MO.—Ordinances have been passed by the council appropriating money for paving the three blocks of street around the federal building. C. S. Curry, Cy. Clk.

KANSAS CITY, MO.—Bids are asked until Dec. 3 for constructing brick pavement in two streets, asphalt pavement in three streets, granitoid sidewalks in three streets and for grading in two avenues. Robert W. Waddell, Cy. Engr.

HOUSTON, TEX.—John W. Maxcy, Designing Engr., writes us that plans and specifications are being prepared for 17,000 sq. yds. of brick, sheet and rock asphalt paving, for which the contract will be let by Dec. 20. A. L. Bowers, Mayor.

DENVER, COLO.—R. W. Speer, Pres. Bd. Pub. Wks., writes us that bids will be asked the first part of January for constructing about 21 miles of 5-ft. stone sidewalks.

MONTCLAIR, COLO.—The town board has appropriated $5,000 for macadamizing, at a cost of $15,000, the other $10,000 to be taxed against property owners. An appropriation of $2,000 has also been made for an artesian well.

SEATTLE, WASH.—R. H. Dimock, Asst. Cy. Engr., writes us that about 31,000 sq. yds. of asphalt paving, at an estimated cost of $80,000, has been ordered, for which bids will be asked in the spring.

TACOMA, WASH.—County Surveyor Noel has estimated the cost of the proposed road across the tide flats at $22,000.

SAN BERNARDINO, CAL.—Bids are asked until Nov. 29 for street paving. Lezare Allen, Cy. Clk.

SAN DIEGO, CAL.—Reports state that improvements to the streets, boulevards and parks are contemplated which will cost about $2,000,000.

SAN FRANCISCO, CAL.—The following bids have been received for paving with bituminous rock and basalt block gutters in Stockton Ave.: Williams, Belser & Co., $12,180; Union Paving Co., $11,009; Flinn & Treacy, $10,912.

SAN RAFAEL, CAL.—Bids are asked until Dec. 4 for grading, graveling, macadamizing, ditching, sprinkling and constructing 3,600 ft. of county road in District No. 9. R. E. Graham, County Clk.

OGDEN, UTAH.—The joint committee has decided to recommend to the council that the plans and specifications for paving Washington Ave. be accepted, and that bids be asked for at once.

MANUFACTURING PLANTS.

NEW HAVEN, CONN.—Bids are reported to have been received by the Winchester Repeating Arms Co. for the proposed addition to their plant. The new building will be three stories, 60 × 200 ft. L. W. Robinson, Arch.

ROSLYN (L. I.), N. Y.—The Roslyn Light & Power Co. has awarded a contract for the erection of an ice plant, at a cost of about $25,000.

SYRACUSE, N. Y.—Taber & Draper, Archs., have completed plans for four of the seven buildings to be erected by Will & Baumer for a stearine plant on the Youngs farm in Salina. The construction is to be started at once.

COLUMBIA, PA.—The stockholders of the Susquehanna Iron & Steel Co. have decided to bond the company's property to the amount of $300,000 for the purpose of building the proposed pipe mill. Bids for the machinery are reported being received.

IRWIN, PA.—The Berwin-White Coal Co. has purchased the Elliott farm, and, it is said, will build a car plant in the spring, to build its own cars.

YORK, PA.—The York Bridge Co. will apply for a charter to build and operate a plant for bridge building. Geo. W. Drury, Grey Webster and N. P. Webster, all of York, are interested.

BALTIMORE, MD.—The board of directors of the penitentiary have decided to advertise for bids and go ahead with the work of building a new factory building at the penitentiary. The building will cost about $50,000, and will be 80 × 95 × 49 ft., and four stories high. Bids will be received on Dec. 4. Plans are being prepared by Hugh S. Magruder, Arch., and are on exhibition at the Builders' Exchange, this city.

PORTSMOUTH, VA.—The Hampton Roads Creosoting Co. has been granted a charter, capitalized at $150,000, and proposes to build and operate a plant for the treatment of wood for preservation. E. A. Buell, Pres., Norfolk; Percy A. Smith, Secy., Berkley.

ATLANTA, GA.—Application for a charter has been made by the Milstead Mfg. Co., capitalized at $150,000. The company will build and operate mills two miles from Conyers. A. J. Milstead, John H. Almand and J. Carroll Payne are interested.

JACKSONVILLE, FLA.—Robert Gambler, Pres. Middle Florida Ice Factory, at Tallahassee, will build an ice factory in this city. The name of the corporation is the East Florida Ice Co. It is capitalized at $80,000. The capacity of the plant will be 150 tons a day.

ELLISVILLE, MISS.—The equipment to be used by the Ellisville Ice & Cold Storage Co. will cost about $8,500, and will be purchased at once.

BIRMINGHAM, ALA.—The plant of the Central Ice Co., at Avondale, which was destroyed by fire last September, will be rebuilt. Plans have already been prepared. Samuel Hart, Treas.

BROWNSVILLE, TENN.—Fire destroyed the cotton gin, grist mill and large planing establishment of L. W. Eader in the southwest part of the town on Nov. 15, the loss being about $10,000.

FAYETTEVILLE, TENN.—The Elk Cotton Mills, C. R. Smith, Supt., will double the capacity of their plant in this city.

KNOXVILLE, TENN.—The Jones Brick Co., located in South Knoxville, is planning to increase its capacity by 40,000 brick per day.

CINCINNATI, O.—Local papers state that an addition is to be made to the plant of the Bullock Electric Mfg. Co in Norwood soon, for the manufacture of electric dynamos. The proposed new building will be 300 × 250 ft., costing about $50,000.

YOUNGSTOWN, O.—Plans for the erection of a 600-ton blast furnace for the Struthers Furnace Co. have been completed.

DETROIT, MICH.—It is stated that a beet sugar factory will be built at Howell by Alex. and Wm. McPherson, of this city.

SAULT STE. MARIE, MICH.—It is reported that the International Tube Co., which proposed to build a $1,000,000 plant at Sault Ste. Marie, Ont., will erect the plant at this place. About 600 men will be employed. Plans have been prepared and orders placed for the machinery. Work will soon be started. F. H. Clerque is interested.——J. P. Hammel, Milwaukee, represents Western paper manufacturers who propose to establish a plant here costing about $750,000. It will be located on the water power canal.

PEORIA, ILL.—It is said that the Cereal Sugar Co., whose plant at St. Louis was recently destroyed, will move to this place.

KANSAS CITY, MO.—The 4-story building at the Cudahy packing plant in Armourdale, was destroyed by fire on Nov. 15, the loss being about $175,000. It is the intention of the company to rebuild at once.

EL PASO, TEX.—J. S. Carey and A. H. Seep has purchased a half interest in the El Paso Foundry & Machine Works, and, it is said, that improvements and enlargements in the works will be made as early as possible.

PUEBLO, COLO.—The Steel Wheel & Wagon Co. has been incorporated with a capital stock of $150,000, and before March 1 next, will be ready to manufacture steel wagons on a large scale. The contracts for its plant have been let. The structural steel to be used will be supplied by the Gary Iron Steel Co., Cleveland, O. Wm. H. Schofield, Pres. and Gen. Mgr.

SEATTLE, WASH.—The Muskegon Brewing Co. has been incorporated and will commence work shortly after Christmas on its plant, which will cost $50,000. Otto G. Meeske, Pres.

CHICO, CAL.—A contract has been let to T. F. Rinehart for the erection of a beet sugar factory at Thomas Creek for the Alvarado Sugar Co. Work will soon be started. The plant will cost about $400,000.

OAKLAND, CAL.—Plans are under way for the plant for the Fig Prune Cereal Co. at Virginia and Fourth Sts.

SAN DIEGO, CAL.—The California Iron Co. has completed plans for its new smelting furnace. The company is capitalized at $1,000,000.

SAN FRANCISCO, CAL.—A $200,000 flour mill will be erected by the McDonald Grain & Milling Co., at Kearney, Montgomery, Chestnut and Francisco Sts. W. E. Keller, Mgr.——The cocoanut factory of L. G. Sresovich & Co., at Sansome and Vallejo Sts., was destroyed by fire on Nov. 16, causing a loss of about $30,000.

MONTREAL, QUE.—Work will be started at once on clearing away the debris of the burned factory of the Dominion Tobacco Co., and the construction of a new building will be started as soon as that work is finished.

MISCELLANEOUS CONTRACTS.

FIRE ENGINE.—Logansport, Ind.—A. D. Fansler, Cy. Clk., writes us that the city is in the market for a fire engine.

DAM.—Webb, N. Y.—Bids are asked until Dec. 5 for constructing a dam on Beaver River. John N. Partridge, Supt. Pub. Wks., Albany.

LOCK GATES.—Cincinnati, O.—Bids are asked until Dec. 16 for constructing steel lock gates for lock No. 9, Muskingum River, Ohio. Maj. E. H. Ruffner, U. S. Engr.

FILLING IN.—Annapolis, Md.—Bids are asked until Dec. 4 for filling in at the U. S. Naval Academy. A. S. Crowninshield, Ch. Bureau Navigation, Navy Dept., Washington, D. C.

DRAINAGE DITCHES.—Bloomfield, Mo.—Bids are asked until Jan. 7 for constructing about 867,095 cu. yds. of drainage ditches in two districts. J. N. Punch, County Clk. A. C. Spiker, Engr.

PORTABLE WALL TELEPHONES.—Washington, D. C.—Bids are asked until Dec. 20 for furnishing wall telephones in lots of 200 f. o. b. place of manufacture. A. W. Greely, Ch. Signal Officer, War Dept.

ROCK CRUSHER.—Napa, Cal.—A committee consisting of A. W. Robinson, F. E. Johnston and others has presented a resolution to the supervisors advocating the purchase of a rock-crushing outfit by the county.

MECHANICAL STOKERS.—Kansas City, Mo.—Bids are asked until Dec. 2 for three mechanical stokers to be set under three 300-HP. boilers, as stated in our advertising columns. Harry B. Walker, Secy. Bd. Pub. Wks.

BOILERS.—Bremerton, Wash.—Bids are asked until Dec. 28 for furnishing and installing two 275-HP. boilers and accessories at the navy yard. (Mordecai T. Endicott, Ch. Bureau Yards and Docks, Navy Dept., Washington, D. C.

FLUSHING TUNNEL.—Milwaukee, Wis.—Richard W. Forrestal has been awarded the contract at $49 a lin. ft. for completing section 2 of the Kinnickinnic River flushing tunnel. There are about 430 ft. of tunnel to be completed.

LAKE.—New Haven, Conn.—The committee appointed by the Mayor has reported in favor of the city's maintaining an artificial lake at a cost of $50,000, and City Engineer Kelly has been instructed to prepare plans for the same.

BOILERS, ETC.—Portland, Ore.—Reports state that the port of Portland commission has decided to ask for bids for the stiffening trusses for the new dredge and also for four water-tube boilers. Plans for the hull will be ready in two or three weeks.

TELEPHONE SYSTEM.—Marion, Ind.—F. B. Bissell, Toledo, O., and J. F. Butterfield, Chicago, Ill., have been awarded a contract by the United Telephone Co. for constructing 60,000 ft. of underground and 50,000 ft. of aerial cable system at $40,000.

DOCK.—Fairport, O.—Reports state that a dock will be built here at a cost of $1,000,000 to be ready at the opening of navigation next year. It is stated that the Lake Erie, Alliance & Wheeling R. R. will be completed to the lake to furnish railroad facilities.

MOBILE, ALA.—The following bids were received on Nov. 21 by Lt. Col. A. N. Damrell, U. S. Engrs., for constructing 10 beacons in Mobile Bay, as advertised in Eng. News: J. H. Gardner, P. O. Box 145, New Orleans, La., $7,303; Randolph & Baer, Philadelphia, Pa., $11,745; D. N. Nicholson, Pensacola, Fla., $8,009; Merrill & Suck, Mobile, Ala., $9,555; W. G. Hieronymus, Mobile, Ala., $11,650; Chas. Funk, Velasco, Tex., $9,350.

OIL PIPE LINE.—Galveston, Tex.—The International Development Co. has been incorporated with a full-paid capital stock of $2,500,000, to construct a pipe line from the Beaumont oil fields to Bolivar Point with a system of storage tanks with a capacity of from 10,000,000 to 20,000,000 barrels of oil and terminals and wharves. Eight-inch pipe will be used and it is expected to have the line in operation in 30 days. N. D. Mepham, Gen. Mgr., St. Louis, Mo.; Zach. W. Tinker, Pres., St. Louis, Mo.

U. S. POSSESSIONS AND CUBA

PUBLIC WORKS BONDS.—San Juan, P. R.—J. M. Ceballos & Co., of New York, have offered to buy the $600,000 at 6% public works bonds at 103.

WATER-WORKS AND ELECTRIC PLANT.—Guines, Cuba.—Reports state that Hugh J. Reilly, 31 Broadway, New York, has been awarded the contract, at about $250,000, for installing water-works and an electric plant in Guines.

RAILWAY.—Hawaii.—Reports state that Whitehouse & Hawthrust, of Honolulu, H. I., have been awarded the contract by the Kona Sugar Co., to build six miles of railway.——The Honolulu Rapid Transit Co. propose to build a line from Punaban to Kalia Road.

COALING MACHINERY.—San Juan, P. R.—Bids are asked until Dec. 28 for constructing two coaling towers, with necessary coal handling machinery at the naval station, San Juan, to cost $20,000. M. T. Endicott, Ch. Bureau Yards and Docks, Navy Dept., Washington, D. C.

WHARF, ETC.—Honolulu, H. I.—Cotton Bros., of Oakland, Cal., have been awarded the contract, at about $150,000 for constructing an 800 ft. wharf for the government. Heckfeld & Co. are interested. Plans for dredging the harbor are being prepared by J. H. Lloyd, Supt. Pub. Wks., Honolulu.

ELECTRIC RAILWAY.—Philippine Islands.—Reports state that a company is being organized in Madison, Wis., to build either an electric or steam railway from Olongapo, on Subig Bay, to Orani, on Manila Bay, about 25 miles. The Northern Electric Co. and Capt. J. H. Culver, of Madison, Wis., are interested.

RAILWAYS.—Porto Rico.—President Roosevelt has signed the concession granted by the Executive Council to the Port America Co., which is to build two railroads in Porto Rico, one north and south from San Juan to Port America, and the other east and west from Aquadilla to Eucanada Honda. The concession is the one which the attorney general decided was illegal because it was exempt from taxation as granted originally. It was modified subsequently by the council so as to make the exemption from taxation conditional on the approval of the insular legislature.

RAILWAYS.—Alaska.—Reports state that McLean Bros., contractors, of Vancouver, B.C., Can., will begin the construction of the proposed new railway in the Klondike region and Alaska, for which a charter was recently granted to Thos. O'Brien, of Dawson, N. W.Ter. Can.; E. C. Hawkins, late Gen. Mgr. White Pass & Klondike R. R., Dawson, is interested.——The Lake Bennett Ry. Co. has been incorporated to build a railway from Dyea River to Lake Bennett, thence to Selkirk in the Yukon Territory. The above mentioned lines have nothing to do with the proposed Trans-Alaskan Ry., to be 825 miles long, and in which J. J. Frey, late Gen. Mgr. A., T. & S. Fe R. R. and Pres. and Mgr. Florence & Cripple Creek Ry., of Denver, Colo., is interested. Work on this latter road, which will cost about $50,000,000, will probably begin in the spring and be completed in five years.

FOREIGN CONTRACTS AND EXPORT NEWS

GOVERNMENT BUILDING.—Puebla, Mex.—Bids and plans will soon be wanted by Governor Martinez, of Puebla, for a palace and a large hospital building.

OFFICE BUILDING.—Paris, France.—Reports state that the Equitable Life Assurance Co., of New York, has decided to erect an office building at the Palace de l'Opera and the Rue de la Paix.

SUGAR REFINERY.—West Prussia.—Reports state that the sugar refinery at Neufahrwasser, Western Prussia, has been destroyed by fire. The loss is 4,000,000 marks ($952,000).

POWER PLANT.—Guanajuato, Mex.—Gov. Gonzal Obregen has made a contract with Leonardo E. Curtis to furnish electric power to the city of Guanajuato and to other places, from a power plant to be built on the Duero River, Michocan.

OFFICE BUILDING.—London, Eng.—A company, composed of Sir Chas. R. Wilson, Earl of Kintore, United Service Club, London; F. B. Esler, 290 Broadway, New York, and Geo. Cornwallis-West, of London, has applied to the London County Council for a 999-year lease of a site on the Strand with a frontage of 750 ft. for a $10,000,000 office building on American plans. It is said that should the county council act favorably on this petition efforts will be made to erect a number of other large buildings.

BRIDGES.—Uganda, Africa.—The American Bridge Co., of Philadelphia and New York, has been awarded the contract for building 20 steel bridges along the line of the Uganda R. R. in East Africa, to cost about $1,000,000. The British government is rebuilding the Uganda R. R., and will soon have the section to Victoria Nyanza completed. The entire work will cost about $24,000,000. The line will be about 580 miles long. It is said that by the construction of this line the demand among the natives for all kinds of goods will greatly increase. Robertson & Rendle, Engrs., 8 Great George St., Westminster, London; George Whitehouse, Ch. Engr. Nairobi, Uganda; R. Anderson, Supt of Works, Niarobi.

RAILWAY.—Mexico.—Reports state that J. M. Neeland, Gen. Mgr. Pan-American Ry., Jonala, Chiapas, Mex., which recently secured a concession for a railway from a point on the Tehuantepec National Ry. to the Guatemalan border, where it will make connection with a railway in that country, has arrived in Mexico City, and is quoted as stating that his company is ready to begin work immediately. Two forces of engineers have been employed, who will begin surveys of the line from either end under the supervision of Chief Engineer E. S. Poinkowsky, of Jonala. The main line has to be completed to Guatemala within 30 months. The total distance is 506 kilometers, and 100 kilometers are already graded under work done by the former concessionaires. The Pan-American road is subsidized, and its construction will be the means of opening up a rich mineral and agricultural district, bringing forward the now little known State of Chiapas. The road will be of value as a military line and Mexico's final link in the chain of roads making up her contribution to the much talked of Pan-American Ry. Walter Everett, Pres., Lyons, Neb.

CONTRACT PRICES.

SEWERAGE SYSTEM.—Santiago, Cuba.—We are informed that the following bids were received by Capt. S.D. Rockenbach, U. S. Engr. Officer, Oct. 21, for contract No. 2 of the proposed sewerage system; the contract has been let to M. J. Dady, who was also awarded the Havana sewer and paving contract; Arthur J. Hobby, Jr., Principal Assistant Engr.:

Bids Received at Santiago, Cuba., Oct. 21, 1901, for Contract No. 2 of the Sewerage System.

Quantities.		J. B. Clow & Co., 36 Obispo, Havana, Cuba.	National Contracting Co., 11 Broadway, New York.	M. J. Dady, 350 Fulton St., Brooklyn, N. Y.	E. J. Kubas, Guantanamo, Cuba.
6-in. sewer	32,000 lin. ft..	$1.42	$1.14	$0.98	$2.12
8-in. "	13,000 " "	1.56	1.28	1.18	2.20
10-in. "	3,500 " "	1.20	1.05	.94	2.20
12-in. "	650 " "	1.50	1.65	1.50	2.60
15-in. "	550 " "	1.50	1.24	1.11	2.10
18-in. "	1,120 " "	3.25	2.71	2.67	4.40
22-in. "	350 " "	4.00	3.61	3.90	5.50
24-in. "	1,100 " "	4.00	4.33	4.61	6.00
33-in. brick sewer, double	1,730 " "	14.00	11.54	8.30	14.00
33-in. brick sewer, single	.....	13.50	9.30	5.30	10.00
42-in. cast-iron pipe sewer	1,442 " "	12.50	3.70	3.75	7.00
24-in. cast-iron force main	960 " "	3.20	2.14	1.55	6.00
Y's on 6-in. sewer	1,730 each...	.70	.85	1.15	.42
" " 8-in. "	780 " ...	1.25	1.26	1.62	.70
" " 10-in. "	210 " ...	1.85	1.85	2.39	1.00
" " 12-in. "	40 " ...	2.50	2.11	3.04	1.25
" " 15-in. "	30 " ...	3.50	3.49	3.57	2.10
" " 18-in. "	135 " ...	5.00	5.90	7.13	3.00
" " 22-in. "	11 " ...	9.00	9.44	11.06	4.00
" " 24-in. "	20 " ...	9.00	11.00	12.98	5.00
Slant on brick sewer	100 " ...	.35	.70	5.00	.60
4-in. house connections	32,363 lin. ft..	.60	.79	.60	1.10
6-in. house connections	3,550 " "	.65	.87	.72	1.30
3-in. farm tile	5,000 " "	.70	.40	.40	.31
Manholes	132 each...	87.00	115.93	50.00	155.00
Single flushtanks	89 " ...	110.00	156.24	55.00	190.00
Double flushtanks	15 " ...	160.00	201.81	70.00	220.00
Extra excavation	200 cu. yds.	2.00	1.00	1.50	2.00
" concrete	100 " "	12.00	12.03	10.25	13.00
" broken stone	100 " "	2.50	2.00	2.00	3.00
" sand	50 " "	2.50	2.50	2.50	3.00
Sheeting left in trench by order	1 M. ft...	60.00	56.00	35.00	60.00
Pumping station	.....	77,000	144,954	45,851	71,000
Total		$258,180	$307,815	$172,139	$318,361

AQUEDUCT AND RESERVOIR.—Boston, Mass.—The following bids were received by the Metropolitan Water Board, Boston, Nov. 21 for constructing sections 1, 2, and 14, of the Weston aqueduct and reservoir; contracts were all let to Nawn & Brock, of Boston:

BIDS RECEIVED AT BOSTON, MASS., NOV. 21, 1901, FOR WORK ON METROPOLITAN WATER-WORKS.

Weston Reservoir, Sec. 2.—Lower Portion of Reservoir Including Dam and Concrete Drain.

Quantities.	Nawn & Brock.	Beckwith & Quackenbush.	Long & Little.	Bruno, Salomone & Petitti.	Cenedella Bros.	Brodhead Contr'ct'g Co.	Troy Public Works Co.	Winston & Co., Clinton, Mass.	Taylor, Carr & Andrews, Boston.
Clearing-grubbing .. 40 acres...	$100.00	$100.00	$75.00	$100.00	$75.00	$90.00	$100.00	$75.00	$98.00
Excavatn: Earth, A. 63,000 cu. yds.	.29	.29	.32	.34	.32	.44	.40	.43	.84
Plans B .....114,000 " "	.34	.34	.39	.37	.45	.39	.40	.47	.84
Concrete drain...4,500 " "	.80	.38	.45	.75	.74	.70	1.00	.70	.84
Rock, reservoir..1,500 " "	1.30	1.50	1.50	1.50	1.35	1.50	2.00	2.00	1.94
Drain & wall. 500 " "	2.50	2.00	3.00	2.95	3.00	2.25	5.00	4.00	3.15
Cleaning surf. rock. 5,000 sq. "	.10	.30	.25	.10	.07	.25	.20	.25	.27
Riprap .....1,600 cu. "	1.00	1.00	1.70	1.75	.85	1.80	2.00	2.00	2.10
Slope paving ..... 850 " "	2.50	3.50	3.75	2.25	2.25	3.50	5.00	3.00	3.15
Cement concrete masonry:									
Portld, 1:2½:4 ..1,200 " "	5.50	6.00	6.50	8.00	8.75	8.00	8.00	9.00	7.50
1 : 2½ : 4½..1,800 " "	5.00	5.70	6.00	7.50	7.80	7.00	7.00	6.00	7.00
Dim. stone masonry 10 " "	40.00	40.00	45.00	35.00	25.00	45.00	50.00	50.00	40.00
Dressg pointed work 100 sq. ft...	.50	.40	.70	.50	.40	.50	.50	.60	.50
16-in. c.-i. pipe.... 250 lin. ft..	.75	.75	.50	1.00	1.00	.65	2.00	.50	.30
Total	$88,293	$90,153	$99,798	$103,063	$110,018	$112,273	$116,500	$121,105	$190,378

Weston Aqueduct, Sec. 14.—Open Channel and Upper Portion of Reservoir.

Bidder.	Excavation: Earth, 230,000 yds.	Excavation: Rock, 500 cu. yds.	Rip-rap, 200 cu. yds.	Slope paving, 70 yds.	Masonry: Portld cem. concrete, 2½:4½ 280 yds.	Masonry: Portld cem. concrete, 3½:7, 100 yds.	Masonry: Ashlar, 40 yds.	Masonry: Dimension stone, 40 yds.	Face dress'g of pointd work, 750 sq. ft.	36-in. c.-i. pipe, 240 ft.	Total.
Nawn & Brock, Boston	$0.23	$1.50	$1.00	$2.00	$5.50	$5.00	$18.00	$30.00	$0.40	$1.00	$58,490
Rowe & Perini, S. Framingham	.27	2.00	.90	1.40	5.50	5.00	19.00	50.00	.12	.40	68,364
Jones & Meehan, Boston, Mass.	.27	3.00	2.00	2.50	8.00	6.00	25.00	25.00	.50	1.50	69,750
Bruno, Salomone & Petitti, E. Boston	.285	1.50	1.85	2.25	8.00	6.50	40.00	50.00	.25	3.00	74,225
Troy Public Works Co., Utica, N. Y.	.33	2.00	2.00	5.00	8.00	7.00	20.00	35.00	.50	2.00	83,645
Metropolitan Contracting Co., Boston.	.355	2.00	2.50	3.50	7.00	6.00	20.00	35.00	.35	2.00	88,898
Long & Little, Leominster, Mass.	.38	2.00	2.00	3.75	7.00	6.50	30.00	50.00	.60	6.00	96,763
Brodhead Contractg Co., Wilkesbarre	.395	2.00	2.00	4.00	7.00	6.00	20.00	40.00	.60	1.75	98,360
Maloney & Peterson, Springfield	.42	3.00	3.00	5.00	6.00	7.00	14.00	30.00	.50	1.00	103,805
Cenedella Bros., Milford, Mass.	.47	2.00	1.15	2.60	9.00	7.00	16.00	25.00	.40	3.00	115,392

Weston Reservoir, Sec. 1.—Central Portion.

Bidder.	Excavation: Earth, 230,000 yds.	Excavation: Rock, 500 c. yds.	Rip-rap, 900 yds.	Sewer pipe: 18-in. for drns, 200 yds.	Sewer pipe: 20-in. clvrt 55 lin. ft.	Total.
Nawn & Brock, Boston.	$0.25	$1.50	$1.00	$2.50	$2.50	$59,588
Jones & Meehan, Boston	.27	3.00	2.00	1.25	1.75	64,971
A. Saucier, S. Frmghm	.275	1.75	1.50	1.10	1.85	65,382
B'kwith & Quackenb'sh	.28	1.50	1.50	1.00	1.20	66,416
Bruno, Salomone & Petitti	.285	1.50	1.85	2.25	2.25	68,314
Brodhead Cont. Co * ...	.335	2.00	2.00	1.25	1.50	79,708
Metropolitan Con. Co.†	.34	2.00	2.25	1.00	1.50	81,008
Cenedella Bros., Milford	.35	2.00	.90	1.60	2.50	82,328
Long & Little, Leomnstr	.32	1.75	2.00	1.50	2.00	76,310
Troy Public Works Co.‡	.35	2.00	2.00	2.00	2.00	83,410
Maloney & Peterson.§..	.37	3.00	3.00	2.00	2.00	89,110

*Wilkesbarre, Pa. †Boston. ‡Utica, N. Y. §Springfield, Mass. Note.—The sewer pipe is to be furnished and laid.

WATER METERS.—Cleveland, O.—Robt. Fisher, Contract Clk., 305 City Hall, writes us that the following bids were received Nov. 20, 1901, for furnishing water meters: (1) being for 10,000 ⅝-in. meters; (2) for 2,000 ⅝-in. meters; (3) for 800 ¾-in. meters; (4) for 200 1-in. meters; (5) for four 6-in. meters: Union Water Meter Co., Worcester, Mass., Columbia, (1) $6.10, (2) $6.10, (3) $9.90, (4) $14.10; Union, (1) $10, (2) $10, (3) $14.25, (4) $19, (5) $300; National Meter Co., New York, Nash, (1) $9, (2) $9, (3) $13.50, (4) $18, (5) $400; "A. N." (1) $10, (2) $10 (3) $15, (4) $20, (5) $400; Crown, (1) $12, (2) $12, (3) $21, (4) $30, (5) $500; Hersey Mfg. Co., South Boston, Mass., (1) $6.63, (2) $7.10, (3) $9.94, (4) $13.28, (5) $320; Henry R. Worthington, Brooklyn, N. Y., (1) $9.25, (2) $9.50, (3) $14.70, (4) $20.50, (5) $490; Permanent Mfg. Co., Cleveland, (1) $7.20, (2) $7.25, (3) $9.60, (4) $14.20; Pittsburg (Pa.) Meter Co., Pittsburg or Keystone, (1) $6.95, (2) $6.95, (3) $10.50, (4) $14.50, (5) $290; Neptune Meter Co., Long Island City, N. Y., (1) $7.50, (2) $7.50, (3) $10.50, (4) $15, (5) $380, for patent resilient frost-proof or storm; same style with patent cast-iron bottom for 10% less than above for ⅝, ¾ and 1-in. sizes; Thomson Meter Co., Brooklyn, N. Y., (3) $12, (4) $16, (5) $400.

INDUSTRIAL NOTES.

A. J. BECKLEY CO., Garwood, N. J., is rebuilding and remodeling the stone crushing plant of the Trenton Quarry Co., Trenton, N. J.

THE ROGERS LOCOMOTIVE CO., Paterson, N. J., has orders for 40 locomotives for the Great Northern R. R. and 15 for the Erie R. R.

F. M. HICKS, 225 Dearborn St., Chicago, has an order from the Munising Ry., of Munising, Mich., for two three-compartment combination cars.

THE COLUMBIA CONSTRUCTION CO., Colby & Abbot Bldg., Milwaukee, was organized last month for the purpose of promoting, building and operating electric railways, electric light and power plants and other electrical work. The company is now building an interurban electric line from Oshkosh to Omro, Wis., 8½ miles, and is figuring on other lines in the same State. The president of the company is Mr. C. C. Smith, formerly of the Falk Mfg. Co.

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